



## Letter of Transmittal

**DATE:** August 25, 2010

TO: Toll Bridge Program Oversight Committee

(TBPOC)

**FR:** Program Management Team (PMT)

**RE:** TBPOC Meeting Materials Packet – September 2, 2010

Herewith is the <u>TBPOC Meeting Materials Packet</u> for the September 2<sup>nd</sup> meeting. The packet includes memoranda and reports that will be presented at the meeting. A <u>Table of Contents</u> is provided following the <u>Agenda</u> to help locate specific topics.



#### **TBPOC MEETING**

## September 2, 2010, 10:00am – 1:00pm Mission Bay Office, 325 Burma Road, Oakland, CA TBPOC - PMT pre-briefing, 10:00am – 11:00am

**TBPOC** meeting, 11:00am – 1:00pm

	Topic	Presenter	Time	Desired Outcome
1.	CHAIR'S REPORT	S. Heminger, BATA	5 min	Information
2.	consent calendar  a. TBPOC Meeting Minutes:  1) July 8, 2010 Coinference Call Minutes*  2) July 13, 2010 Meeting Minutes*  3) July 29, 2010 Conference Call Minutes*  4) August 17, 2010 Conference Call Minutes*	A. Fremier, BATA	3 min	Approval
	b. 2011 TBPOC Meeting Calendar*	A. Fremier, BATA	2 min	Approval
3.	PROGRESS REPORTS  a. Draft Project Progress and Financial Update August 2010**	A. Fremier, BATA	5 min	Approval
4.	SAN FRANCISCO-OAKLAND BAY BRIDGE (SFOBB) UPDATES  a. Yerba Buena Island (YBI) Detour 1) Update  b. Yerba Buena Island Transition Structures No. 1 1) Update	T. Anziano, CT T. Anziano, CT	5 min 5 min	Information Information
	<ul> <li>c. Yerba Buena Island Transition Structures No. 2</li> <li>1) Scope Change Request*</li> <li>d. Oakland Touchdown (OTD) No. 2</li> <li>1) Temporary OTD Detour for SFOBB</li> </ul>	S. Hulsebus, CT  B. Maroney, CT	5 min 20 min	Approval Approval
	Acceleration*	B. Waroney, C1	20 mm	прргочаг
5.	ANTIOCH/ DUMBARTON BRIDGE SEISMIC RETROFIT a. Updates***	J. Weinstein, BATA	5 min	Information
	<ul> <li>b. Dumbarton Bridge Seismic Retrofit Budget Change***</li> </ul>	J. Weinstein, BATA	5 min	Approval
6.	TBPOC/ ABF/ TYLMN Discussion  a. Self-Anchored Suspension (SAS) Superstructure Mitigation and Acceleration Update***	PMT	45 min	Information
	b. SAS Superstructure Budget Change*	PMT	5 min	Approval
	c. SAS Superstructure CCO 160***	PMT	10 min	Approval
7.	OTHER BUSINESS			

Mission Bay Office, Oakland, CA

\* Attachments

<sup>\*\*</sup> Stand-alone document included in the binder

<sup>\*\*\*</sup> Forthcoming or to be sent under separate cover



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#### **TBPOC MEETING** September 2, 2010

September 2, 2010		
INDEX TAB	AGENDA ITEM	DESCRIPTION
1	1	CHAIR'S REPORT
2	2	a. TBPOC Meeting Minutes 1) July 8, 2010 Conference Call Minutes* 2) July 13, 2010 Meeting Minutes* 3) July 29, 2010 Conference Call Minutes* 4) August 17, 2010 Conference Call Minutes*
		b. 2011 TBPOC Meeting Calendar*
3	3	PROGRESS REPORTS  a. Draft Project Progress and Financial Update August 2010**
4	4	<ul> <li>SAN FRANCISCO-OAKLAND BAY BRIDGE UPDATES</li> <li>a. Yerba Buena Island (YBI) Detour</li> <li>1) Update</li> <li>b. Yerba Buena Island Transition Structures No. 1</li> <li>1) Update</li> <li>c. Yerba Buena Island Transition Structures No. 2</li> <li>1) Scope Change Request*</li> <li>d. Oakland Touchdown (OTD) No. 2</li> <li>1) Temporary OTD Detour for SFOBB Acceleration*</li> </ul>
5	5	DUMBARTON/ ANTIOCH BRIDGE SEISMIC RETROFIT a. Updates* b. Dumbarton Bridge Seismic Retrofit Budget Change***
6	6	<ul> <li>TBPOC/ABF/TYLMN DISCUSSION         <ul> <li>a. Self-Anchored Suspension (SAS) Superstructure Mitigation and Acceleration Update***</li> <li>b. SAS Superstructure Budget Change*</li> <li>c. SAS Superstructure CCO 160***</li> </ul> </li> </ul>
7	7	OTHER BUSINESS
1		

<sup>\*\*</sup> Stand-alone document included in the binder \*\*\* Forthcoming or to be sent under separate cover

## ITEM 1: CHAIR'S REPORT

No Attachments



TO: Toll Bridge Program Oversight Committee DATE: August 25, 2010

(TBPOC)

FR: Andrew Fremier, Deputy Executive Director, BATA

RE: Agenda No. - 2a1

Consent Calendar

Item- TBPOC Meeting Minutes

July 8, 2010 Conference Call Minutes

#### **Recommendation:**

**APPROVAL** 

#### **Cost:**

N/A

## **Schedule Impacts:**

N/A

#### Discussion:

The Program Management Team has reviewed and requests TBPOC approval of the July 8, 2010 Conference Call Minutes.

#### Attachment(s):

July 8, 2010 Conference Call Minutes



# TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

#### **CONFERENCE CALL MINUTES**

July 8, 2010, 3:00 PM – 4:00 PM

**Attendees**: TBPOC Members: Steve Heminger, Bimla Rhinehart and Cindy McKim

<u>PMT Members</u>: Tony Anziano, Andrew Fremier, and Stephen Maller <u>Participants</u>: Michele DiFrancia, Mike Forner, Beatriz Lacson, Rick Land,

Peter Lee, Bart Ney, Dina Noel, Bijan Sartipi, and Jon Tapping

Convened: 3:02 PM

Items	Action
1. SELF-ANCHORED SUSPENSION (SAS) SUPERSTRUCTURE MITIGATION AND ACCELERATION UPDATE	
<ul> <li>a. Lift 13/14 Issues and Negotiations with Contractor</li> <li>S. Heminger (Chair) reported that he learned of ABF not getting the go-ahead on extra shop space until mid-June. He asked if this was correct, since this item was approved by the TBPOC in May.</li> </ul>	T. Anziano to look into the timing issue.
<ul> <li>J. Tapping referred to the "Executive Summary Proposed East End Resolution/Acceleration Concepts, Revised July 7, 2010" comparing the CT Rough Order of Magnitude (ROM) figures with ABF's ROM on East End Delay Cost Proposed Incentive-Disincentive Provisions, and Other Mitigation/Acceleration Actions; and draft "Alternative ABF Incentive/Disincentive Provisions, July 6, 2010" which resulted from his recent negotiations with the contractor.</li> <li>There have been changes on both sides which have narrowed the gap between the two ROM's.</li> </ul>	• Staff to continue to discuss item 4 of the Executive Summary with the contractor, and develop strategies to reduce OTD duration for presentation to the TBPOC at the August meeting.

Items	Action
The TBPOC reached a consensus on settlement terms and directed staff on the next steps.  b. PIO Activities for Tower Arrival and Mr. Kang's Visit to Bay Area 1) Schedule of Events – July 13, 2010 • P. Lee summarized the activities scheduled for July 13.  o B. Ney recommended taking the optional, after hours Autodesk tour.  2) Draft TBPOC/ABF/ZPMC Meeting Agenda • T. Anziano referred to the draft TBPOC/ABF/ZPMC meeting agenda focusing on the "Acceleration of Final Work to Meet June 2011 Shipping Date" and expressed the goal of finalizing it no later than tomorrow for transmittal to the participants.  o Items of discussion included: sequence of participant presentation/discussion, attendance, and other agenda items.	<ul> <li>T. Anziano/J. Tapping to develop an offer sheet on items 1, 2, 3 and 4 of the Executive Summary, as discussed, for TBPOC deliberation prior to the July 13 presentation to the contractor.</li> <li>Staff to furnish the TBPOC with appropriate script/talking points for the July 13 tower ceremony.</li> </ul>
<ul> <li>EYEBAR UPDATE</li> <li>A. Fremier provided the background and status of the TY Lin International revised eyebar contract with BATA, which is on the BATA Oversight Committee (OC) July 14 meeting agenda.</li> <li>C. McKim suggested ensuring that pertinent materials/talking points are adequately vetted, and agreed to having a joint Caltrans/BATA presentation to the BATA OC on July 14.</li> </ul>	• A. Fremier to provide the Department with the recommended talking points and meeting package prior to the July 14 BATA OC meeting.
3. DUMBARTON BRIDGE SEISMIC RETROFIT UPDATE	
2 of 3	

## (continued)

	Items	Action
	<ul> <li>T. Anziano reported that no final decision has been reached on the lowest responsive bidder.</li> <li>The Chair noted that fund allocation for this project is scheduled for the BATA meeting on July 28.</li> </ul>	
4.	OTHER BUSINESS	
	• N/A	

Adjourned: 3:57 PM

## **CONFERENCE CALL MINUTES**

July 8, 2010, 3:00 PM – 4:00 PM

#### **APPROVED BY:**

STEVE HEMINGER, Executive Director Bay Area Toll Authority	Date
<b>BIMLA G. RHINEHART,</b> Executive Director California Transportation Commission	Date
Cindy McKim, Director California Department of Transportation	Date



TO: Toll Bridge Program Oversight Committee DATE: August 25, 2010

(TBPOC)

FR: Andrew Fremier, Deputy Executive Director, BATA

RE: Agenda No. - 2a2

Consent Calendar

Item- TBPOC Meeting Minutes

July 13, 2010 Meeting Minutes

#### **Recommendation:**

**APPROVAL** 

#### **Cost:**

N/A

## **Schedule Impacts:**

N/A

#### Discussion:

The Program Management Team has reviewed and requests TBPOC approval of the July 13, 2010 Meeting Minutes.

#### Attachment(s):

July 13, 2010 Meeting Minutes



# TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

#### **MEETING MINUTES**

July 13, 2010, 9:00 AM – 10:00 PM Public Information Office, Building 1, Room 169 410 Avenue of the Palms, Treasure Island, CA

**Attendees**: TBPOC Members: Steve Heminger, Bimla Rhinehart, and Cindy McKim

<u>PMT Members</u>: Tony Anziano, Andrew Fremier, and Stephen Maller <u>Participants</u>: Ade Akinsanya, Bill Casey, Michele DiFrancia, Mike Forner, Beatriz Lacson, Rick Land, Peter Lee, Bart Ney, Dina Noel, Bijan Sartipi, Ken

Terpstra, Jon Tapping, and Jason Weinstein

Convened: 9:55 AM

	Items	Action
1.	<ul> <li>CHAIR'S REPORT</li> <li>S. Heminger, the Chair, welcomed all attendees to Treasure Island.</li> </ul>	
2.	<ul> <li>a. TBPOC Meeting Minutes</li> <li>1) June 3, 2010 Meeting Minutes</li> <li>2) June 28, 2010 Conference Call Minutes</li> <li>b. Contract Change Orders (CCOs)</li> <li>1) Yerba Buena Island Detour CCO</li> <li>105-S1 (Steel Fabrication for Viaduct Design Modifications), \$250,000</li> <li>2) Self-Anchored Suspension (SAS)</li> <li>Superstructure CCO 139 (Partial for Mitigation Opportunities of East End Fabrication Strategy),</li> <li>\$402,364.16 (for a total of \$17,402,364.16)</li> </ul>	The TBPOC APPROVED the Consent Calendar, as presented.
3.	PROGRESS REPORTS  a. Final June 2010 Project Progress and Financial Update	
	<ul> <li>A. Fremier presented, for TBPOC information, the Final June 2010 Project Progress and Financial Update. The PMT approved the</li> </ul>	<ul> <li>The TBPOC confirmed APPROVAL of the Final June 2010 Project Progress and Financial Update by the PMT</li> </ul>

	Items	Action
	report through TBPOC-delegated authority and was released on July 7. TBPOC confirmation of this approval was requested.	through TBPOC-delegated authority.
4.	SAN FRANCISCO-OAKLAND BAY BRIDGE (SFOBB) UPDATES  a. Yerba Buena Island Detour (YBID)  1) Update  • T. Anziano indicated that the project may be completed by October 2010, two months early per current schedule.  b. Yerba Buena Island Transition Structures (YBITS) No. 1  1) Update  • T. Anziano noted that YBITS No. 1 contractor MCM is moving in as YBID winds down.  c. Oakland Touchdown (OTD) No. 1  1) Update  • T. Anziano reported that OTD No. 1 project acceptance occurred on June 10, 2010.  d. Mechanical, Electrical & Piping (MEP) Update  1) Bridge Lighting Assembly Procurement Contract Addendum No. 1  • T. Anziano presented, for TBPOC approval, Bridge Lighting Assembly Procurement Contract Addendum No. 1, which provides minor clarifications to the contract and the elimination of the procurement of light fixtures, in order to review additional fixture options. This will be obtained under a BATA	• The TBPOC <b>APPROVED</b> the Bridge Lighting Assembly Procurement Contract Addendum No. 1, as presented.
5	procurement contract.  DUMBARTON/ ANTIOCH BRIDGE RETROFIT UPDATE	

## (continued)

	Items	Action
	<ul> <li>T. Anziano reported that final legal analysis is ongoing and decision on the Dumbarton bidding protest will be forthcoming.</li> <li>After decision is determined, mobilization is anticipated within 30 to 60 days.</li> <li>Allocation of \$75 million for this project is scheduled for the July 28 BATA meeting.</li> </ul>	
	<ul> <li>T. Anziano stated that the Antioch Bridge Retrofit Project has mobilized.</li> </ul>	
6 OT	HER BUSINESS	
•	N/A	

Adjourned: 10:04 AM

## **TBPOC MEETING MINUTES**

July 13, 2010, 9:00 AM – 10:00 PM

#### **APPROVED BY:**

STEVE HEMINGER, TBPOC Chair Executive Director, Bay Area Toll Authority	Date
BIMLA G. RHINEHART, TBPOC Vice-Chair Executive Director, California Transportation Commission	Date
CINDY McKIM Director, California Department of Transportation	Date



TO: Toll Bridge Program Oversight Committee DATE: August 25, 2010

(TBPOC)

FR: Andrew Fremier, Deputy Executive Director, BATA

RE: Agenda No. - 2a3

Consent Calendar

Item- TBPOC Meeting Minutes

July 29, 2010 Conference Call Minutes

#### **Recommendation:**

**APPROVAL** 

#### **Cost:**

N/A

## **Schedule Impacts:**

N/A

#### Discussion:

The Program Management Team has reviewed and requests TBPOC approval of the July 29, 2010 Conference Call Minutes.

#### Attachment(s):

July 29, 2010 Conference Call Minutes



# TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

#### **CONFERENCE CALL MINUTES**

July 29, 2010, 9:00 AM – 10:00 AM

**Attendees**: TBPOC Members: Steve Heminger, Bimla Rhinehart and Cindy McKim

PMT Members: Tony Anziano, Andrew Fremier, and Stephen Maller

Participants: Michele DiFrancia, Beatriz Lacson, Rick Land,

Peter Lee, Brian Maroney, Bijan Sartipi, Jon Tapping, and Jason Weinstein

Convened: 9:05 AM

	Items	Action
(S M U	ELF-ANCHORED SUSPENSION  (AS) SUPERSTRUCTURE ITIGATION AND ACCELERATION PDATE  East End Resolution Update  J. Tapping provided an update on his recent discussions with ABF.  TBPOC is still awaiting a counter offer from ABF, which is expected around August 10.  TBPOC concerns, strategies, and closing the gap were discussed.  The target resolution date is September 2, at the TBPOC meeting, per recent conversations between S. Heminger and B. Luffy.	<ul> <li>Staff to meet with ABF as soon as possible, preferably before August 10.</li> <li>The PMT to further review the incentive/disincentive proposal.</li> <li>J. Tapping to continue working with ABF.</li> </ul>
b.	<ul> <li>ZPMC List Response</li> <li>T. Anziano summarized the list of concerns that ZPMC expressed at the TBPOC/ABF/ZPMC July 13 meeting. The corresponding actions recommended were discussed.</li> <li>It was recommended that the TBPOC respond in writing to ZPMC.</li> </ul>	• T. Anziano to draft a letter to ZPMC incorporating the recommended actions discussed in response to their list of concerns, for PMT review and presentation to the TBPOC at or prior to the TBPOC September 2 meeting.

	Items	Action
2.	SAS CONTRACT CHANGE ORDERS	Action
	<ul> <li>(CCOs)</li> <li>a. CCO 142 (Additional Cable Compacting/Wrapping Equipment)</li> <li>T. Anziano presented, for TBPOC approval, CCO 142, in an amount not to exceed \$2 million, for additional cable compacting and cable wrapping machines.</li> <li>b. CCO 156 (Tower Bolt Replacement)</li> <li>B. Maroney presented, for TBPOC approval, CCO 156, in an amount not to exceed \$10 million, for the replacement of tower bolt assemblies. Immediate purchase would limit schedule delays for the tower erection.</li> </ul>	<ul> <li>The TBPOC APPROVED CCO 142, with the stipulation that the cost of the equipment is part of the final mitigation/acceleration settlement.</li> <li>The TBPOC APPROVED CCO 156, as presented.</li> </ul>
3.	ORAFT TBSRP 2010 SECOND QUARTER PROJECT PROGRESS AND FINANCIAL UPDATE  • A. Fremier presented, for TBPOC information, the draft 2010 Second Quarter Project Progress and Financial Update, which requires TBPOC approval at least two days prior to its scheduled release on August 14.  ○ P. Lee referred to page 6 of the report and summarized the forecast revisions.  ➢ Reasons for the changes and items to be updated were discussed.  ➢ The report is in line with the second quarter 2010 Risk Management Report.  ○ The Chair delegated report approval authority to A. Fremier in his absence.	<ul> <li>A. Fremier to approve the final 2010 Second Quarter Project Progress and Financial Update in S. Heminger's absence.</li> <li>P. Lee to ensure report cover change.</li> </ul>

## (continued)

Items	Action
<ul> <li>4. OTHER BUSINESS</li> <li>The Chair stated that the next TBPOC meeting will be on September 2, 2010, and should be moved from Sacramento to Oakland. The TBPOC members concurred.</li> <li>T. Anziano reported that the tower lift yesterday went smoothly, and indicated that the second OBG shipment is expected to arrive mid-August.</li> </ul>	Staff to cancel the TBPOC     August 5 meeting, and move the     September 2 meeting from     Sacramento to Oakland.

Adjourned: 10:20 AM

## **CONFERENCE CALL MINUTES**

July 29, 2010, 9:00 AM – 10:00 AM

#### **APPROVED BY:**

STEVE HEMINGER, Executive Director Bay Area Toll Authority	Date
BIMLA G. RHINEHART, Executive Director California Transportation Commission	Date
Cindy McKim, Director California Department of Transportation	Date



TO: Toll Bridge Program Oversight Committee DATE: August 25, 2010

(TBPOC)

FR: Andrew Fremier, Deputy Executive Director, BATA

RE: Agenda No. - 2a4

Consent Calendar

Item- TBPOC Meeting Minutes

August 17, 2010 Conference Call Minutes

## Recommendation:

**APPROVAL** 

#### **Cost:**

N/A

## **Schedule Impacts:**

N/A

#### Discussion:

The Program Management Team has reviewed and requests TBPOC approval of the August 17, 2010 Conference Call Minutes.

#### Attachment(s):

August 17, 2010 Conference Call Minutes



# TOLL BRIDGE PROGRAM OVERSIGHT COMMITTEE

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

#### **CONFERENCE CALL MINUTES**

August 17, 2010, 4:00 PM - 5:00 PM

**Attendees**: TBPOC Members: Steve Heminger, Bimla Rhinehart and Cindy McKim

PMT Members: Tony Anziano, Andrew Fremier, and Stephen Maller

Participants: Michele DiFrancia, Rick Land, Peter Lee, Brian Maroney, Dina

Noel, Jon Tapping, and Jason Weinstein

Convened: 4:05 PM

	Items	Action
1.	<ul> <li>CHAIR'S REPORT</li> <li>The Chair, Steve Heminger, noted today's agenda as: 1) Status of ABF negotiations; 2) Governor's visit to Shanghai in mid-September; and, 3) State budget and impact on projects.</li> </ul>	
2.	SELF-ANCHORED SUSPENSION (SAS) SUPERSTRUCTURE MITIGATION AND ACCELERATION UPDATE	
	<ul> <li>Status of ABF Negotiations</li> <li>T. Anziano reported that J. Tapping continues to have an ongoing discussion with ABF/ P. Vander Waart. PMT has responded to ZPMC's response.</li> <li>J. Tapping provided an overview of his materials distributed to the TBPOC, including a comparison between the Department's and ABF's estimates for CCO 160, and the latest incentive/disincentive schemes.</li> <li>S. Heminger will discuss these items with B. Luffy prior to the TBPOC meeting on September 2.</li> </ul>	
3.	<ul> <li>GOVERNOR'S VISIT TO SHANGHAI</li> <li>T. Anziano reported that the Governor will pay a short visit to ZPMC on September 13.</li> </ul>	

## (continued)

	Items	Action
	<ul> <li>TBPOC indicated that it was not practical for them to visit China due primarily to budget issues.</li> <li>The PMT will likely visit China around the same time as the Governor.</li> </ul>	
4.	<ul> <li>STATE BUDGET AND IMPACT ON PROJECTS</li> <li>C. McKim reported that transportation projects are being delayed due to the impasse on the state budget, and this impact has been widely reported in the media.</li> <li>The SFOBB project, however, has not been impacted due to its dedicated stream of funding.</li> </ul>	
5.	<ul> <li>OTHER BUSINESS</li> <li>BATA may need to make a budget adjustment related to CCO 160. This may occur on September 8 or 22.</li> <li>Next TBPOC conference call is scheduled for August 27, 9:00 AM – 10:00 AM.</li> </ul>	

Adjourned: 5:05 PM

## **CONFERENCE CALL MINUTES**

August 17, 2010, 4:00 PM – 5:00 PM

APPROVED BY:		
STEVE HEMINGER, Executive Director Bay Area Toll Authority	Date	
BIMLA G. RHINEHART, Executive Director California Transportation Commission	Date	
Cindy McKim, Director California Department of Transportation	Date	



TO: Toll Bridge Program Oversight Committee DATE: August 25, 2010

(TBPOC)

FR: Andrew Fremier, Deputy Executive Director, BATA

RE: Agenda No. - 2b

Consent Calendar

Item- 2011 TBPOC Meeting Calendar

#### Recommendation:

APPROVAL

#### **Cost:**

N/A

#### **Schedule Impacts:**

N/A

#### Discussion:

The Program Management Team has reviewed and requests TBPOC approval of the 2011 TBPOC Meeting Calendar.

#### Attachment(s):

2011 TBPOC Meeting Calendar

#### 2011 TBPOC Meeting Calendar (as of September 2, 2010)

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21 - President's Day

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31 - Cesar Chavez Day

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30 - Memorial Day

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10 - Columbus Day

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11 - Veteran's Day

24,	25 -	Thanksgiving	Day and	day after

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26 - Day after Christmas Day



TO: Toll Bridge Program Oversight Committee DATE: August 25, 2010

(TBPOC)

FR: Andrew Fremier, Deputy Director, BATA

RE: Agenda No. - 3a

**Progress Reports** 

Item- Draft TBSRP Project Progress and Financial Update August 2010

#### **Recommendation:**

For Information/APPROVAL Confirmation

#### **Cost:**

N/A

#### **Schedule Impacts:**

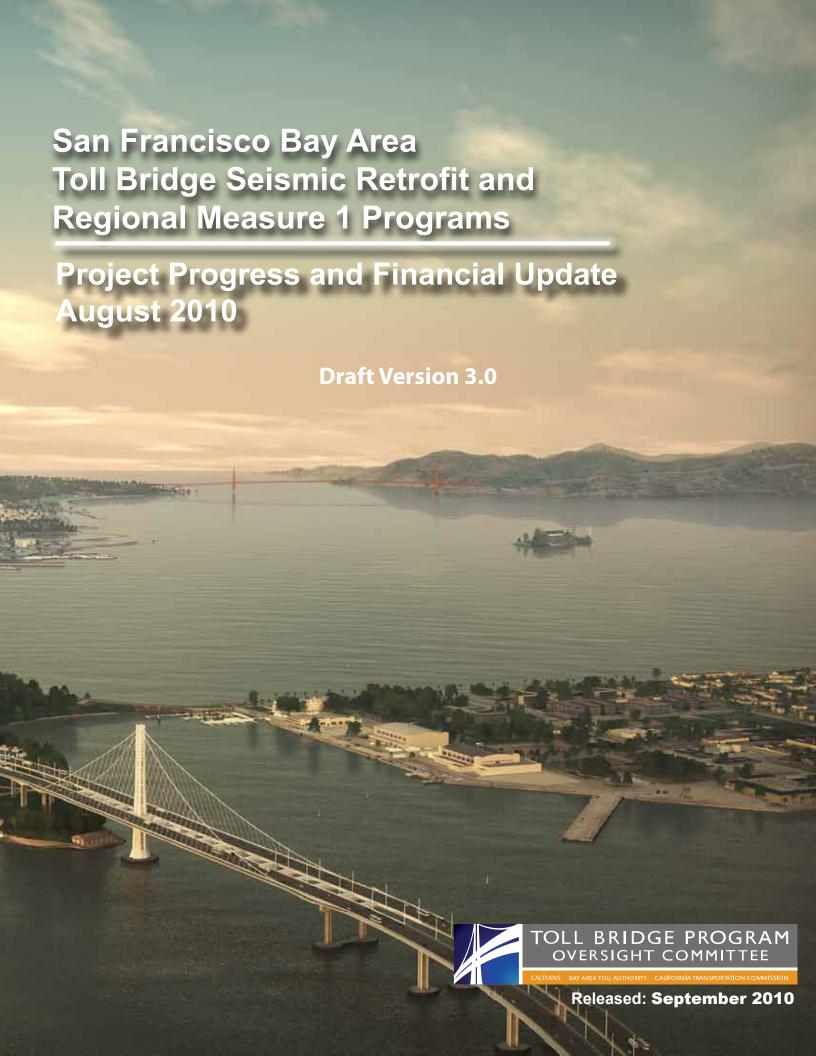
N/A

#### **Discussion:**

Included in this package, for TBPOC information, is a draft Project Progress and Financial Update August 2010. The final version with the most current actual costs and forecasts and updated progress pictures will be reviewed and approved by the PMT, through TBPOC-delegated authority, and distributed on September 7, 2010. The PMT requests TBPOC confirmation of this approval.

#### Attachment(s):

Draft Project Progress and Financial Update August 2010 (see end of binder)





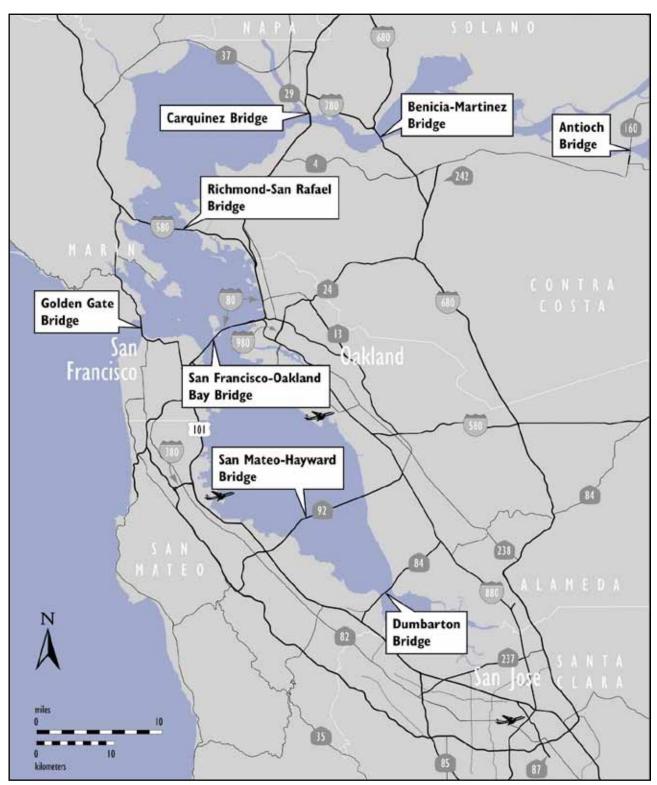




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## Map of Bay Area Toll Bridges



<sup>\*</sup> The Golden Gate Bridge is owned and operated by the Golden Gate Bridge, Highway, and Transportation District.

#### Introduction

In July 2005, Assembly Bill (AB) 144 (Hancock) created the Toll Bridge Program Oversight Committee (TBPOC) to implement a project oversight and project control process for the Benicia-Martinez Bridge and State Toll Bridge Seismic Retrofit Program projects. The TBPOC consists of the Caltrans Director, the Bay Area Toll Authority (BATA) Executive Director and the Executive Director of the California Transportation Commission (CTC). The TBPOC's project oversight and control processes include, but are not limited to, reviewing bid specifications and documents, providing field staff to review ongoing costs, reviewing and approving significant change orders and claims in excess of \$1 million (as defined by the Committee) and preparing project reports. AB 144 identified the Toll Bridge Seismic Retrofit Program (TBSRP) and the new Benicia-Martinez Bridge Project as being under the direct oversight of the TBPOC. In January 2010, Assembly Bill (AB) 1175 (Torlakson) amended the TBSRP to include the Antioch and Dumbarton seismic retrofit projects. The current Toll Bridge Seismic Retrofit Program is as follows:

Toll Bridge Seismic Retrofit Projects	Seismic Safety Status
Dumbarton Bridge Seismic Retrofit	Awarded
Antioch Bridge Seismic Retrofit	Construction
San Francisco-Oakland Bay Bridge East Span Replacement	Construction
San Francisco-Oakland Bay Bridge West Approach Replacement	Complete
San Francisco-Oakland Bay Bridge West Span Seismic Retrofit	Complete
San Mateo-Hayward Bridge Seismic Retrofit	Complete
Richmond-San Rafael Bridge Seismic Retrofit	Complete
1958 Carquinez Bridge Seismic Retrofit	Complete
1962 Benicia-Martinez Bridge Seismic Retrofit	Complete
San Diego-Coronado Bridge Seismic Retrofit	Complete
Vincent Thomas Bridge Seismic Retrofit	Complete

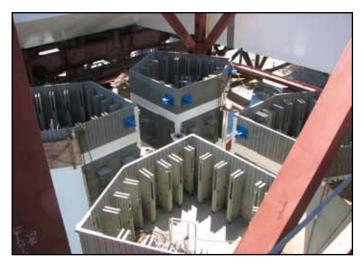
The New Benicia-Martinez Bridge is part of a larger program of toll-funded projects called the Regional Measure 1 (RM1) Toll Bridge Program under the responsibility of BATA and Caltrans. While the rest of the projects in the RM1 program are not directly under the responsibility of the TBPOC, BATA and Caltrans will continue to report on their progress as an informational item. The RM1 program includes:

Regional Measure 1 Projects	Open to Traffic Status
Interstate 880/State Route 92 Interchange Reconstruction	Construction
1962 Benicia-Martinez Bridge Reconstruction	Open
New Benicia-Martinez Bridge	Open
Richmond-San Rafael Bridge Deck Overlay Rehabilitation	Open
Richmond-San Rafael Bridge Trestle, Fender & Deck Joint Rehabilitation	Open
Westbound Carquinez Bridge Replacement	Open
San Mateo-Hayward Bridge Widening	Open
State Route 84 Bayfront Expressway Widening	Open
Richmond Parkway	Open

## SUMMARY OF MAJOR PROJECT HIGHLIGHTS, ISSUES, AND ACTIONS



Aerial View of the First Tower Lift Being Erected



SAS Top View of Tower 1 Lift 1 Shafts



SAS Roadway Box 7 Being Offloaded

# **Toll Bridge Seismic Retrofit Program Risk Management**

A major element of the 2005 AB144, the law creating the TBPOC, was legislative direction to implement a more aggressive risk management program. Such a program has been implemented in stages over time to ensure development of a robust and comprehensive approach to risk management. A milestone has been reached in the risk management program with all elements now fully incorporated, resulting in one of the most detailed and comprehensive risk management programs in the country today.

A comprehensive risk assessment is performed for each project in the program. Based upon those assessments, a forecast is developed using the average cost of risk. These forecasts can both increase and decrease as risks are identified, resolved or retired. Nonetheless, assurances have been made that the public is informed of the risks that have been identified and the possible expense they could necessitate.

As of the end of the second quarter of 2010, the 50 percent probable draw on Program Contingency is \$367 million. The potential draw ranges from about \$200 million to \$550 million. Program Contingency decreased by \$240 million in the second quarter of 2010. The majority of the reduction can be explained by the removal of \$137 million from the Antioch Bridge budget, transfer of \$203 million to the East Span COS budget, both of which were partially offset by a decrease in the Dumbarton Bridge cost estimate.

The current Program Contingency balance is sufficient to cover the cost of currently identified risks. Risk mitigation actions are continuously developed and implemented to reduce the potential draw on the Program Contingency.

## San Francisco-Oakland Bay Bridge (SFOBB) East Span Seismic Replacement Project SAS Superstructure Contract

The prime contractor constructing the Self-Anchored Suspension (SAS) Bridge from the completed Skyway to Yerba Buena Island is a joint venture of American Bridge/Fluor (ABF). Significant progress is being made both here in the Bay Area and around the world. The first 12 of 28 steel roadway boxes have arrived and all 12 have been lifted into place. The next four steel roadway boxes, lifts 7 and 8 east and



SFO Bay Bridge Detour Structure Completed over the Labor Day Weekend

westbound, shipped on July 25 and are expected to arrive at Pier 7 in Oakland on August 16, 2010. These boxes, fabricated in Shanghai, China, join other bridge components that have been arriving from around the country and the world.

The first shipment of tower boxes arrived at Pier 7 on July 9th 2010. All bridge components undergo a rigorous quality review by the fabricator, ABF, and Caltrans to ensure that only bridge components that have been built in accordance to the specifications will be shipped. Shipments of roadway and tower boxes will continue throughout the year.

The completion of the last roadway sections at the east end of the new span are on the critical path and the east end fabrication has been delayed due to the complexity of the work. The TBPOC is currently in the process of negotiating with the contractor to address these challenges, mitigate delays, and to accelerate the remaining work with a goal of opening the bridge to traffic by 2013. One option being discussed is a "seismic safety opening" of the bridge to traffic before non-essential systems are completed, like architectural lighting or removal of unneeded temporary support structures. The costs of these changes are included in the cost forecasts noted in this report and could require utilization of the program contingency.

Caltrans has established risk management teams to identify and evaluate the challenges and future potential risks to complete the project on time and on budget. In particular, teams are reviewing cable-erection plans and mitigation actions. Based on the latest risk management assessment, the current forecast for the SAS contract is \$293 million more than the current budget.

#### Yerba Buena Island Detour Contract

The Yerba Buena Island Detour contractor, C.C. Myers, has rolled out the existing bridge span and rolled in the new east tie-in span of the detour structure that diverts traffic off the existing bridge to the detour structure that now ties into the Yerba Buena Island Tunnel. The traffic switch occurred as scheduled on Labor Day weekend. Work is completed on the demolition of the old approach span and construction continues on a number of accelerated foundations for the future transition structures from the Self-Anchored Suspension (SAS) bridge to the tunnel. Upon removal of the old approach span and completion of future accelerated transition structure columns, the area will be turned over to the Yerba Buena Island Transition Structures (YBITS) #1 contractor that will construct the new approach structures.

## Yerba Buena Island Transition Structures #1 Contract

The YBITS#1 contract has been awarded to MCM Construction, the same contractor that completed the Oakland Touchdown (OTD) #1 contract. Construction will not start until the demolition of the existing approach and YBITS advanced columns have been completed. Caltrans and the contractor are in the submittal and planning process for the contract. Construction is scheduled to start in September 2010.



**YBITS** Columns and viaduct

## SUMMARY OF MAJOR PROJECT HIGHLIGHTS, ISSUES, AND ACTIONS



Oakland Touchdown #1 Bike Path and Hand Railing



Oakland Touchdown #1 Service Platforms Installed



Aerial View of Oakland Touchdown #1 looking West

#### **Oakland Touchdown #1 Contract**

The Oakland Touchdown (OTD) #1 contractor, MCM Construction completed the work on June 8, 2010. The contract constructed the westbound approach from the toll plaza to the Skyway structure and the portion of the eastbound approach that is not in conflict with the existing bridge structure. The remaining approach work will be completed by a future OTD #2 contract.

#### **TBSRP Capital Outlay Support**

Based on initial discussions with the contractors, early completion of the East Span Project was believed to be possible and sufficient to mitigate potential identified support cost increases. The support cost increases are primarily due to the need to re-advertise the SAS contract, and to increase opportunities for early completion of the East Span Project. These decisions include a 12-month schedule extension provided during bid time to attract the maximum number of bidders for the SAS contract, and an extension of the YBI Detour contract to advance future foundation and column work of the transition structure and west end deck reconstruction. Since early completion and the intended cost savings are deemed to be unlikely, action was taken to transfer program contingency funds to cover the costs by the end of the second quarter of 2010. Opportunities to economize and reduce costs in this area will continue to be pursued.

## **TBSRP Programmatic Risks**

This category includes risks that are not yet scoped within existing contracts and/or that spread across multiple contracts. The interdependencies between all of the contracts in the program result in the potential for one contract's delay to impact the entire program that are accounted for in the net programmatic risks.



**Dumbarton Bridge** 



**Antioch Bridge** 



92/880 NWCONN Bridge Construction in Progress

## **Dumbarton Bridge Seismic Retrofit**

When first conceived, the Toll Bridge Seismic Retrofit Program only identified seven of the nine state owned toll bridges to be in need of seismic retrofit, which excluded the Dumbarton and Antioch Bridges. Further seismic vulnerability studies on those structures completed by Caltrans and BATA determined that they were in need of retrofit based on current seismic standards.

On October 11, 2009, Governor Schwarzenegger signed Assembly Bill 1175, which added the Dumbarton and Antioch Bridges to the Toll Bridge Seismic Retrofit Program. In part to fund these seismic retrofits, a toll increase on the seven stateowned toll bridges in the Bay Area will go into effect on July 1, 2010. Bids for the Dumbarton Bridge Seismic Retrofit were opened on June 15, 2010. Caltrans has awarded the contract to Shimmick Construction of Oakland. Because of the low bid, the TBPOC is forecasting a reduction of more than \$200 million for the project

## **Antioch Bridge Seismic Retrofit**

Bids for the Antioch Bridge Retrofit Contract were opened on March 10, 2010. The contract was awarded to California Engineering Contractors, Inc. on April 22, 2010. The awarded contract was significantly less than the engineer's estimate for the work and has resulted in a significant cost forecast reduction. The original budget for the project was \$267 million. Because of the low bid, the TBPOC is forecasting a need for only \$98 million to complete the project. The retrofit is forecast to be completed by May 2012.

# Regional Measure 1 Toll Bridge Program (RM1)

# Interstate 880/State Route 92 Interchange Reconstruction Project

On this Interchange Reconstruction Project, the new eastbound State Route 92 to northbound Interstate 880 direct connector structure (ENCONN) was completed and opened to detour traffic on May 16, 2009, while the southern half of the new separation structure was opened in April 2010 to detour traffic. Work is now ongoing on the remaining northern half of the separation structure. The project is forecast to be substantially completed as planned in June 2011, pending weather or unforeseen construction delays.

## **Toll Bridge Seismic Retrofit Program Cost Summary**

Contract Status

AB 144/SB 66 Budget (July 2005)

TBPOC Approved Changes

Current TBPOC Approved Budget (July 2010) Cost to Date (June 2010)

**Current Cost** Forecast (July 2010)

Cost Variance Cost Status

		а	b	c = a + b	d	е	f = e - c	
SFOBB East Span Seismic Replacement								
Capital Outlay Construction								
Skyway	Completed	1,293.0	(38.9)	1,254.1	1,236.9	1,254.1	-	•
SAS Marine Foundations	Completed	313.5	(32.6)	280.9	274.8	280.9	-	•
SAS Superstructure	Construction	1,753.7	-	1,753.7	1,054.0	2,046.8	293.1	•
YBI Detour	Construction	131.9	360.9	492.8	452.8	489.4	(3.4)	•
YBI Transition Structures (YBITS)		299.3	(93.0)	206.3	12.3	238.4	32.1	•
YBITS 1	Construction			144.0	12.3	164.3	20.3	•
YBITS 2	Design			59.0	-	70.8	11.8	•
YBITS Landscaping	Design			3.3	-	3.3	-	•
Oakland Touchdown (OTD)		283.8	4.2	288.0	208.7	282.1	(5.9)	•
OTD 1	Completed			212.0	200.8	208.9	(3.1)	•
OTD 2	Design			62.0	-	59.2	(2.8)	•
OTD Electrical Systems	Design			4.4	-	4.4	-	•
Submerged Electric Cable	Completed			9.6	7.9	9.6	-	•
Existing Bridge Demolition	Design	239.2	(0.1)	239.1	-	233.0	(6.1)	•
Stormwater Treatment Measures	Completed	15.0	3.3	18.3	16.7	18.3	-	•
Other Completed Contracts	Completed	90.4	-	90.4	89.8	90.4	-	•
Capital Outlay Support		959.3	203.0	1,162.3	858.0	1,272.2	109.9	•
Right-of-Way and Environmental Mitigation		72.4	-	72.4	51.3	72.4	-	•
Other Budgeted Capital		35.1	(3.3)	31.8	0.7	7.7	(24.1)	•
Total SFOBB East Span Replacement		5,486.6	403.5	5,890.1	4,256.0	6,285.7	395.6	
antioch Bridge Seismic Retrofit								•
Capital Outlay Construction and Mitigation	Construction		70.0	70.0	-	62.5	(7.5)	•
Capital Outlay Support			31.0	31.0	15.8	35.5	4.5	•
Total Antioch Bridge Seismic Retrofit		-	101.0	101.0	15.8	98.0	(3.0)	
Dumbarton Bridge Seismic Retrofit								•
Capital Outlay Construction and Mitigation	Advertised		270.0	270.0	0.3	92.7	(177.3)	•
Capital Outlay Support			95.0	95.0	21.9	56.0	(39.0)	•
Total Dumbarton Bridge Seismic Retrofit		-	365.0	365.0	22.2	148.7	(216.3)	
Other Program Projects		2,268.4	(64.6)	2,203.8	2,158.5	2,191.7	(12.1)	•
Miscellaneous Program Costs		30.0	-	30.0	25.5	30.0	-	•
Net Programmatic Risks*		-	-	-		202.8	202.8	•
Program Contingency		900.0	(191.9)	708.1	-	341.1	(367.0)	•
Total Toll Bridge Seismic Retrofit Program		8,685.0	613.0	9,298.0	6,478.0	9,298.0		•

Within approved schedule and budget

Identified potential project risks that could significantly impact approved schedules and budgets if not mitigated

Known project impacts with forthcoming changes to approved schedules and budgets

\* The Net Programmatic Risks of \$202.8 million is comprised of \$195.8 million program level risks and \$7 million risk reconciliation.

### Toll Bridge Seismic Retrofit Program Schedule Summary

	AB144/SB 66 Project Completion Schedule Baseline (July 2005)	TBPOC Approved Changes (Months)	Current TBPOC Approved Completed Schedule (July 2010)	Current Completion Forecast (July 2010)	Schedule Variance (Months)	Schedule Status	Remarks/Notes
	g	h	i=g+h	j	k=j-i	1	
SFOBB East Span Seismic Replacement					'		
Contract Completion							
Skyway	Apr 2007	8	Dec 2007	Dec 2007	-	•	See Page 28
SAS Marine Foundations	Jun 2008	(5)	Jan 2008	Jan 2008	-	•	See Page 18
SAS Superstructure	Mar 2012	12	Mar 2013	Oct 2013	7	•	See Page 19
YBI Detour	Jul 2007	41	Dec 2010	Dec 2010	-	•	See Page 15
YBI Transition Structures (YBITS)	Nov 2013	12	Nov 2014	Mar 2015	4		See Page 16
YBITS 1			Sep 2013	Dec 2013	3	•	
YBITS 2			Nov 2014	Mar 2015	4	•	
YBITS Landscaping			TBD	TBD	-	•	
Oakland Touchdown	Nov 2013	12	Nov 2014	Mar 2015	4		See Page 29
OTD 1			Jun 2010	June 2010	-	•	
OTD 2			Nov 2014	Mar 2015	4	•	
OTD Electrical Systems			TBD	TBD	-	•	
Submerged Electric Cable			Jan 2008	Jan 2008	-	•	
Existing Bridge Demolition	Sep 2014	12	Sep 2015	Dec 2015	3	•	
Stormwater Treatment Measures	Mar 2008	-	Mar 2008	Mar 2008	-	•	
SFOBB East Span Bridge Opening and Of	ther Milestones						
OTD Westbound Access			Aug 2009	Aug 2009	-	•	
YBI Detour Open			Sep 2009	Sep 2009	-	•	See Page 15
Westbound Open	Sep 2011	12	Sep 2012	April 2013	7	•	
Eastbound Open	Sep 2012	12	Sep 2013	Dec 2013	3	•	
Antioch Bridge Seismic Retrofit							
Contract Completion			Aug 2012	May 2012	(3)	•	See Page 34
Dumbarton Bridge Seismic Retrofit							
Contract Completion			Sep 2013	Sep 2013	-	•	See Page 36

Notes: 1) Figures may not sum up to totals due to rounding effects.
2) TBSRP Forecasts for the Monthly Reports are generally updated on a quarterly basis in conjunction with quarterly risk analysis assessments for the TBSRP Projects.

### **Regional Measure 1 Program Cost Summary**

Contract Status BATA Baseline Budget (July 2005)

BATA Approved Changes Current BATA Approved Budget (July 2010)

Cost to Date (June 2010) Current Cost Forecast (July 2010) Cost Variance Cost Status

		а	b	c = a + b	d	е	f = e - c	
Interstate 880/Route 92 Interchange R	econstruction							
Capital Outlay Construction	Construction	94.8	66.2	161.0	100.3	161.0	-	•
Capital Outlay Support		28.8	34.6	63.4	54.1	63.4	-	•
Capital Outlay Right-of-Way		9.9	7.0	16.9	12.3	16.9	-	•
Project Reserve		0.3	3.4	3.7	-	3.7	-	
Total I-880/SR-92 Interchange Reconstruction		133.8	111.2	245.0	166.7	245.0	-	
Other Completed Program Projects		1,978.8	182.6	2,161.4	2,086.8	2,161.4	-	
Total Regional Measure 1 Toll Bridge Program		2,112.6	293.8	2,406.4	2,253.5	2,406.4	-	

Within approved schedule and budget

Identified potential project risks that could significantly impact approved schedules and budgets if not mitigated

Known project impacts with forthcoming changes to approved schedules and budgets

### **Regional Measure 1 Program Schedule Summary**

•	•		•				
	BATA Baseline Completion Schedule (July 2005)	BATA Approved Changes (Months)	Current BATA Approved Completion Schedule (July 2010)	Current Completion Forecast (July 2010)	Schedule Variance (Months)	Schedule Status	Remarks/Notes
	g	h	i=g+h	j	k=j-i	1	
Interstate 880/Route 952 Interchange F	Reconstruction						
Contract Completion							
Interchange Reconstruction	Dec 2010	6	Jun 2011	Jun 2011	-	•	See Page 48

Notes: 1) Figures may not sum up to totals due to rounding effects.





### San Francisco-Oakland Bay Bridge Seismic Retrofit Strategy

When a 250-ton section of the upper deck of the East Span collapsed during the 7.1-magnitude Loma Prieta Earthquake in 1989, it was a wake-up call for the entire Bay Area. While the East Span quickly reopened within a month, critical questions lingered: How could the Bay Bridge—a vital regional lifeline structure—be strengthened to withstand the next major earthquake? Seismic experts from around the world determined that to make each separate element seismically safe on a bridge of this size, the work must be divided into numerous projects. Each project presents unique challenges. Yet there is one common challenge — the need to accommodate the more than 280,000 vehicles that cross the bridge each day.



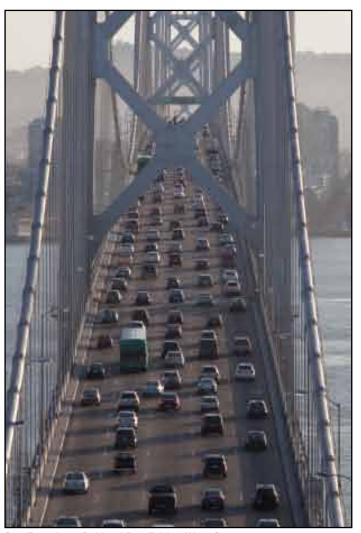
Seismic safety retrofit work on the West Approach in San Francisco—bounded on the west by 5th Street and on the east by the anchorage of the west span at Beale Street—involved completely removing and replacing this one-mile stretch of Interstate 80, as well as six on- and off-ramps within the confines of the West Approach's original footprint. This project was completed on April 8, 2009.

# West Span Seismic Retrofit Project Project Status: Completed 2004

The West Span lies between Yerba Buena Island and San Francisco and is made up of two complete suspension spans connected at a center anchorage. Retrofit work included adding massive amounts of steel and concrete to strengthen the entire West Span, along with new seismic shock absorbers and bracing.



**West Approach Overview** 



San Francisco-Oakland Bay Bridge West Span

### **East Span Seismic Replacement Project**

Rather than a seismic retrofit, the two-mile long East Span is being completely rebuilt. When completed, the new East Span will consist of several different sections, but will appear as a single streamlined span. The eastbound and westbound lanes of the East Span will no longer include upper and lower decks. The lanes will instead be parallel, providing motorists with expansive views of the bay. These views will also be enjoyed by bicyclists and pedestrians, thanks to a new path on the south side of the bridge that will extend all the way to Yerba Buena Island. The new span will be aligned north of the existing bridge to allow traffic to continue to flow on the existing bridge as crews build the new span.

The new span will feature the world's longest Self-Anchored Suspension (SAS) bridge that will be connected to an elegant roadway supported by piers (Skyway), which will gradually slope down toward the Oakland shoreline (Oakland Touchdown). A new transition structure on Yerba Buena Island (YBI) will connect the SAS to the YBI Tunnel and will transition the East Span's sideby-side traffic to the upper and lower decks of the tunnel and West Span.

When construction of the new East Span is complete and vehicles have been safely rerouted to it, the original East Span will be demolished.

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Architectural Rendering of the New East Span of the San Francisco-Oakland Bay Bridge

# San Francisco-Oakland Bay Bridge East Span Replacement Project Summary

The new East Span bridge can be split into four major components—the Skyway and the Self-Anchored Suspension bridge in the middle and the Yerba Buena Island Transition Structures and Oakland Touchdown approaches at either end. Each component is being constructed by one to three separate contracts that have been sequenced together.

Highlighted below are the major East Span contracts and their schedules. The letter designation before each contract corresponds to contract descriptions in the report.

Note: Dates shown above are project completion forecast dates.

# 



# San Francisco-Oakland Bay Bridge East Span Replacement Project Yerba Buena Island Detour (YBID)

As with all of the Bay Bridge's seismic retrofit projects, crews must build the Yerba Buena Island Transition Structures (YBITS) without disrupting traffic. To accomplish this task, YBID eastbound and westbound traffic was shifted off the existing roadway and onto a temporary detour on Labor Day weekend 2009. Drivers will use this detour, just south of the original roadway, until traffic is moved onto the new East Span.

### Α

### **YBID Contract**

Contractor: C.C. Myers Inc

Approved Capital Outlay Budget: \$492.8 M Status: 98% Complete as of July 2010

This contract was originally awarded in early 2004 to construct the detour structure for the planned 2006 opening of the new East Span. Due to the re-advertisement of the SAS superstructure contract in 2005 because of a lack of funding at the time, the bridge opening was rescheduled to 2013. To better integrate the contract into the current East Span schedule and to improve seismic safety and mitigate future construction risks, the TBPOC has approved a number of changes to the contract, including adding the deck replacement work near the tunnel that was rolled into place over Labor Day weekend 2007, advancing future transition structure foundation work and making design enhancements to the temporary detour structure. These changes have increased the budget and forecast for the contract to cover the revised project scope and potential project risks.

**Status:** Work is completed on the demolition of the old approach span and construction continues on a number of accelerated foundations for the future transition structures from the Self-Anchored Suspension (SAS) bridge to the tunnel. Upon removal of the old approach span and completion of future accelerated transition structure columns, the area will be turned over to the Yerba Buena Island Transition Structures (YBITS) #1 contractor that will construct the new approach structures.



YBI Detour Truss Rolled In Labor Day 2009



West Tie-In Phase #1 Rolled in on Labor Day 2007

# San Francisco-Oakland Bay Bridge East Span Replacement Project Yerba Buena Island Transition Structures (YBITS)

The new Yerba Buena Island Transition Structures (YBITS) will connect the new SAS bridge span to the existing Yerba Buena Island Tunnel, transitioning the new side-by-side roadway decks to the upper and lower decks of the tunnel. The new structures will be cast-in-place reinforced concrete structures that will look very similar to the already constructed Skyway structures. While some YBITS foundations and columns have been advanced by the YBID contract, the remaining work will be completed under three separate YBITS contracts.

### B YBITS #1 Contract

Contractor: MCM Construction, Inc.

Approved Capital Outlay Budget: \$144.0 M

Status: In Construction



Overview of YBITS, YBID and Existing East Span

The YBITS #1 contract will construct the mainline roadway structures from the SAS bridge to the YBI tunnel. On December 15, 2009, Caltrans opened three bids for the Yerba Buena Island Transitions Structures (YBITS) #1 contract. On February 4, 2010, Caltrans awarded the YBITS #1 Contract to MCM Construction, Inc. Construction work will start when the YBID contractor has completed demolition of the old viaduct structure. MCM Construction, Inc. is also the firm that constructed the Oakland Touchdown #1 contract.

**Status:** MCM Construction started work on submittals on March 10, 2010. Construction is scheduled to start in early September, 2010.



Rendering of Overview of Future Yerba Buena Island Transition Structures (top) in Progress with Detour Viaduct (bottom) Completed

### **YBITS #2 Contract**

Contractor: TBD

**Approved Current Capital Outlay Budget:** 

\$59.0 M

Status: In Design

The YBITS #2 contract will demolish the detour viaduct after all traffic is shifted to the new bridge and will construct a new eastbound on-ramp to the bridge in its place. The new ramp will also provide the final link for bicycle/pedestrian access off the SAS bridge onto Yerba Buena Island.

### **YBITS Landscaping Contract**

Contractor: TBD

Approved Capital Outlay Budget \$3.3M

Status: In Design

Upon completion of the YBITS work, a follow-on landscaping contract will be executed to re-plant and landscape the area.

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### Yerba Buena Island Transition Structures Advanced Work

Due to the re-advertisement of the SAS superstructure contract in 2005, it became necessary to temporarily suspend the detour contract and make design changes to the viaduct. To make more effective use of the extended contract duration and to reduce overall project schedule and construction risks, the TBPOC approved the advancement of foundation and column work from the Yerba Buena Island Transition Structures contract.

Status: Work continues on the columns for the Yerba Buena Island Transition Structures advanced work.



Yerba Buena Island Transition Structures Advanced Columns

### San Francisco-Oakland Bay Bridge East Span Replacement Project Self-Anchored Suspension (SAS) Bridge

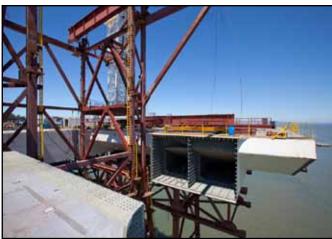
If one single element bestows world class status on the new Bay Bridge East Span, it is the Self-Anchored Suspension (SAS) bridge. This engineering marvel will be the world's largest SAS span at 2,047 feet in length, as well as the first bridge of its kind built with a single tower.

The SAS was separated into three separate contracts— construction of the land-based foundations and columns at Pier W2; construction of the marine-based foundations and columns at Piers T1 and E2; and construction of the SAS steel superstructure, including the tower, roadway, and cabling. Construction of the foundations at Pier W2 and at Piers T1 and E2 was completed in 2004 and 2007, respectively.

### **SAS Land Foundation Contract**

Contractor: West Bay Builders, Inc. Approved Capital Outlay Budget: \$26.4 M Status: Completed October 2004

The twin W2 columns on Yerba Buena Island provide essential support for the western end of the SAS bridge, where the single main cable for the suspension span will extend down from the tower and wrap around and under the western end of the roadway deck. Each of these huge columns required massive amounts of concrete and steel and are anchored 80 feet into the island's solid bedrock.



SAS T1 Framing Tower Erection in Progress



SAS Overview of W2 Cap Beam

### **C** SAS Marine Foundations Contract

Contractor: Kiewit/FCI/Manson, Joint Venture Approved Capital Outlay Budget: \$280.9 M Status: Completed January 2008

Construction of the piers at E2 and T1 required significant on-water resources to drive the foundation support piles down, not only to bedrock, but also through the bay water and mud (see rendering on facing page).

The T1 foundation piles extend 196 feet below the waterline and are anchored into bedrock with heavily reinforced concrete rock sockets that are drilled into the rock. Driven nearly 340 feet deep, the steel and concrete E2 foundation piles were driven 100 feet deeper than the deepest timber piles of the existing east span in order to get through the bay mud and reach solid bedrock.

### D SAS Superstructure Contract

Contractor: American Bridge/Fluor Enterprises, Joint Venture

Approved Capital Outlay Budget: \$1.75 B Status: 54% Complete as of July 2010

The SAS bridge is not just another suspension bridge. Rising 525 feet above mean sea level and embedded in rock, the single-tower SAS span is designed to withstand a massive earthquake. Traditional main cable suspension bridges have twin cables with smaller suspender cables connected to them. These cables hold up the roadbed and are anchored to the east end of the box girders. While there will appear to be two main cables on the SAS, there will actually only be one. This single cable will be anchored within the eastern end of the roadway, carried over the tower and then wrapped around the two side-by-side decks at the western end.

The single-steel tower will be made up of four separate legs connected by shear link beams which function much like a fuse in an electrical circuit. These beams will absorb most of the impact from an earthquake, preventing damage to the tower legs.

The next several pages highlight the construction sequence of the SAS and are followed by detailed updates on specific construction activities.

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Architectural Rendering of New Self-Anchored Suspension Span and Skyway

# TOLL BRIDGE SEISMIC RETROFIT PROGRAM Self-Anchored Suspension (SAS) Construction Sequence

### STEP 1 - CONSTRUCT TEMPORARY SUPPORT STRUCTURES

Temporary support structures will need to be erected from the Skyway to Yerba Buena Island to support the new SAS bridge during construction.

**Status:** Foundations and temporary support structures are complete with the exception of the westbound mid-truss section, which is awaiting the erection of eastbound steel roadway boxes 7 and 8 in late August. After eastbound lifts 7 and 8 are lifted onto of the temporary support structure, the westbound mid-truss section will be erected to accommodate the installation of westbound roadway boxes 7 and 8 in early September 2010.



The roadway boxes are being lifted into place by using the shear-leg crane barge. The boxes are being bolted and welded together atop the temporary support trusses to form two continuous parallel steel roadway boxes.

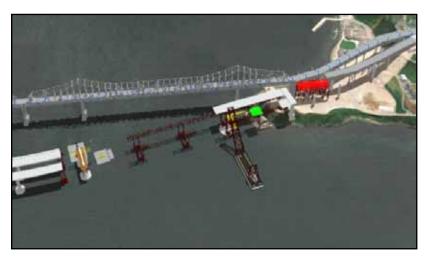
Status: The third shipment consisting of steel roadway boxes 7 and 8 east and westbound shipped on July 25 and forecast to arrive at Pier 7 in Oakland on August 16, 2010. The eastbound lifts 7 and 8 are forecast for erection in late August 2010. Six eastbound and six westbound roadway boxes have been lifted into place and are being bolted and welded together. To date, five crossbeams have been erected between the roadway boxes.

### **STEP 3 - INSTALL TOWER**

Each of the four legs of the tower will be erected in five separate lifts. The tower boxes will be installed using a temporary erection tower and lifting jacks.

**Status:** The first tower lift segments shipped on June 9 and arrived at Pier 7 in Oakland on July 9, 2010. The first tower lift segment was placed onto the tower foundation on July 28, 2010. The three other tower first lift segments are forecast to be erected by August 6, 2010.







### STEP 4 - MAIN CABLE AND SUSPENDER INSTALLATION

The main cable will be pulled from the east end of the SAS bridge, over the tower, and wrapped around Pier W2 and again back over the tower and to the west end of the SAS bridge deck. Suspender cables will be added to lift the roadway decks off the temporary support structure.

Status: Cable installation is pending the erection of the tower and roadway spans. The first half of the cables arrived in January 2010. The second half shipped on June 12, 2010 and arrived at Pier 7 Oakland on June 18, 2010. The cables are now stored in the warehouse at Pier 7 in Oakland.



The new bridge will first open in the westbound direction pending completion of the Yerba Buena Island Transition Structures.

**Status:** Westbound opening is forecast for fall 2013. The westbound approach from Oakland to the Skyway was completed by the Oakland Touchdown #1 contract in June 2009.

### **STEP 6 - EASTBOUND OPENING**

Opening of the bridge in the eastbound direction is pending completion of Oakland Touchdown #2. Westbound traffic will need to be routed off the existing bridge before the eastbound approach structure can be completed.

**Status:** The eastbound opening is forecast for December 2013.







Yerba Buena Island Transition SAS Skyway Oakland Touchdown 2

# TOLL BRIDGE SEISMIC RETROFIT PROGRAM Self-Anchored Suspension (SAS) Superstructure Fabrication Activities

### Roadway and Tower Segments

Like giant three-dimensional jigsaw puzzles, the roadway and tower boxes of the SAS bridge are hollow steel shells that are internally strengthened and stiffened by a highly engineered network of welded steel ribs and diaphragms. The use of steel in this manner allows for a flexible yet relatively light and strong structure able to withstand the massive loads placed on the bridge during seismic events.

On the critical path to completing the bridge are the fabrication of the last four roadway boxes (segments 13 and 14 east and west). Start of fabrication of these boxes has fallen behind schedule due to delays in the fabrication drawing preparation process. These delays will likely preclude the westbound opening of the bridge in 2012, but the push for the opening of the bridge to traffic in both directions in 2013 continues.

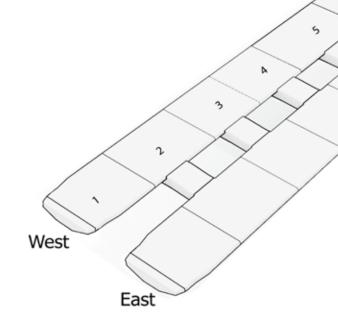
All components undergo a rigorous quality review by ZPMC, ABF, and Caltrans to ensure that only bridge components that have been built according to contract specifications will be shipped.

Roadway Box Fabrication Status: As shown in the diagram to the right, roadway boxes 1 through 6 east and west have been completed and shipped to the Bay Area. Boxes 7 and 8 east and westbound shipped on July 26 and forecast to arrive at Pier 7 in Oakland on August 16, 2010. Roadway box 9 and 10 are in trial assembly and forecast to ship mid-August with tower Lift 2. The remaining boxes are still being pieced together into larger segments. Fabrication of sub-assemblies for box 13 and 14 started in late July 2010.

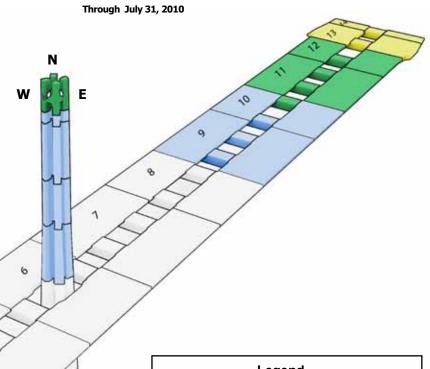
**Tower Fabrication Status:** Each of the four legs of the towers is composed of five separate lifts. The lifts get progressively shorter and lighter as they progress up the tower. Currently, the first four lifts of tower boxes are in various stages of fabrications with lifts 1 and 2 furthest along. Tower boxes 1 and 2 have been trial-fit together to ensure alignment. The first of the tower boxes shipped on June 18 and arrived in Oakland on July 9, 2010. Tower lift 3 is undergoing vertical assembly to lift 2 and tower lifts 4 and 5 are in shaft assembly. The second tower lift is forecast for shipment in mid-September 2010.



Trial Assembly of Lift 2 and 3 Completed at Heavy Dock



### **Fabrication Progress Diagram**





Roadway Boxes Shipment 3 (Voyage 4) Prior to Departure





Milling of Lift 4 Shafts in Milling Yard



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**ZPMC Ship Yard** 

Yerba Buena Island Transition SAS Skyway Oakland Touchdown

# TOLL BRIDGE SEISMIC RETROFIT PROGRAM Self-Anchored Suspension (SAS) Superstructure Fabrication Activities (cont.)

### Cables and Suspenders

One continuous main cable will be used to support the roadway deck of the SAS bridge. Anchored into the eastern end of the bridge, the main cable will be anchored with the roadway box at the east end of the SAS near Pier E1, extend over the main tower at T1, loop around the western end of the roadway decks at Pier W2, and then travel back over the main tower to the western end of the box girder. The main cable will be made up of bundles of individual wire strands. Supporting the roadway decks to the main cable will be a number of smaller suspender cables. The main cable will be fabricated in China and the suspender cables in Missouri, USA.

**Status:** All cable has been fabricated and delivered to the job site and stored at Pier 7 warehouse in Oakland.



**SAS Cable Bands Packing for Shipment** 

# Saddles, Bearings, Hinges, and Other Bridge Components

The mounts on which the main cable and suspender ropes will sit are made from solid steel castings. Castings for the main cable saddles are being made by Japan Steel Works, while the cable bands and brackets are being made by Goodwin Steel in the United Kingdom.

The bridge bearings and hinges that support, connect, and transfer loads from the self-anchored suspension (SAS) span to the adjoining sections of the new east span are being fabricated in a number of locations. Work on the bearings is being performed in Pennsylvania, USA and Hochang, South Korea, while hinge pipe beams are being fabricated in Oregon, USA.

**Status:** The cable saddles and hinges at the W2 cap beam and YBITS are under fabrication. The west deviation saddles arrived at Pier 7 in San Francisco on April 15, 2010. All other saddles are completed and were shipped to the job site on June 22, 2010.



SAS Overall View of Hinge K Pipe Beam

# TOLL BRIDGE SEISMIC RETROFIT PROGRAM Self-Anchored Suspension (SAS) Superstructure Field Activities



**Shear-Leg Barge Crane** 



Temporary Structures Supporting Eastbound and Westbound Roadway Boxes and Crossbeams



SAS E2 Cap Beam and the end of the Skyway

### Shear-Leg Barge Crane

The massive shear-leg barge crane that is helping to build the SAS superstructure arrived in the San Francisco Bay on March 12, 2009 after a trans-Pacific voyage.

The crane and barge are separate units operating as a single entity named the "Left Coast Lifter." The 400-by-100-foot barge is a U.S-flagged vessel that was custom built in Portland, Oregon by U.S. Barge, LLC and outfitted with the crane by Shanghai Zhenhua Heavy Industry Co. Ltd. (ZPMC) at a facility near Shanghai, China. The crane's boom weighs 992 tons and is 328 feet long. The crane can lift up to 1,873 tons, including the deck and tower boxes for the SAS.

**Status:** The shear-leg barge crane arrived at the job site March 2009. The crane has off-loaded and placed all temporary support structures and SAS roadway boxes and crossbeams.

### **Temporary Support Structures**

To erect the roadway decks and tower of the bridge, temporary support structures were first put in place. Almost a bridge in itself, the temporary support structures stretch from the end of the completed Skyway back to Yerba Buena Island. For the tower, a strand jack system is being built into the tower's temporary frame to elevate the upper sections of the tower into place. These temporary supports are being fabricated in the Bay Area, as well as in Oregon and in China at ZPMC.

**Status:** The temporary support structures are substantially complete. A mid-section of the westbound truss has been left out for installation of roadway boxes 7 and 8 eastbound.

### Cap Beams

Construction of the massive steel-reinforced concrete cap beams that link the columns at Piers W2 and E2 was left to the SAS superstructure contractor and represents the only concrete portions of work on that contract. The east and west ends of the SAS roadway will rest on the cap beams and the main cable will wrap around Pier W2, while anchoring into the east end of the SAS deck sections near E2.

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Status: Completed March 2009

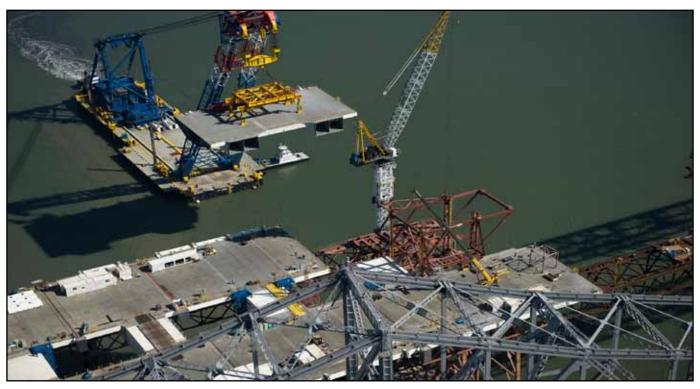
# TOLL BRIDGE SEISMIC RETROFIT PROGRAM Self-Anchored Suspension (SAS) Superstructure Installation Activities

Upon arrival in Oakland, the steel roadway and tower sections are off-loaded directly from the transport ship onto barges to await installation atop the temporary support structures. Steel roadway boxes will be installed from west to east. Due to the shallow waters near Yerba Buena Island, the eastbound lanes on the south side of the new bridge will be installed first, then to be followed by the westbound lanes. In total, there are 28 roadway boxes (14 in each direction) that range from 560 to 1660 tons and from 80 to 230 feet long.

The tower comprises four legs, each made up of four tower lifts that make up the majority of the height of the tower, the tower grillage, and finally the tower head.

**Status:** The first eight east and west roadway boxes arrived in the Bay Area in late January 2010. Four additional roadway boxes arrived on April 18, 2010 and all 12 lifts were lifted onto the temporary support structures and are being welded and bolted together to form a continuous roadway in each direction. The next four boxes for lifts 7 and 8 east and westbound were shipped on July 25, 2010 and forecast to arrive on August 16, 2010.





Shear-leg Crane Placing Westbound Roadway Box 6 on the Temporary Support Structures



Aerial View of the Shear-leg Barge Crane Placing Westbound Roadway Box 6 into Position on the Temporary Structures

Yerba Buena Island Transition SAS Skyway Oakland Touchdown 27

# San Francisco-Oakland Bay Bridge East Span Replacement Project Skyway

The Skyway, which comprises much of the new East Span, will drastically change the appearance of the Bay Bridge. Replacing the gray steel that currently cages drivers, a graceful, elevated roadway supported by piers will provide sweeping views of the bay.

### **E** Skyway Contract

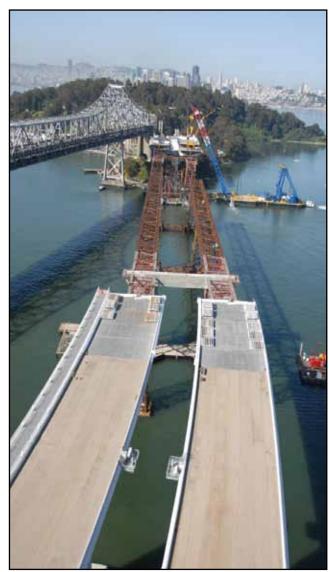
Contractor: Kiewit/FCI/Manson, Joint Venture Approved Capital Outlay Budget: \$1.25 B Status: Completed March 2008

Extending for more than a mile across Oakland mudflats, the Skyway is the longest section of the East Span. It sits between the new Self-Anchored Suspension (SAS) span and the Oakland Touchdown. In addition to incorporating the latest seismic-safety technology, the side-by-side roadway decks of the Skyway feature shoulders and lane widths built to modern standards.

The Skyway's decks are composed of 452 pre-cast concrete segments (standing three stories high), containing approximately 200 million pounds of structural steel, 120 million pounds of reinforcing steel, 200 thousand linear feet of piling and about 450 thousand cubic yards of concrete. These are the largest segments of their kind ever cast and were lifted into place by custom-made winches.

The Skyway marine foundation consists of 160 hollow steel pipe piles measuring eight feet in diameter and dispersed among 14 sets of piers. The 365-ton piles were driven more than 300 feet into the deep bay mud. The new East Span piles were battered or driven in at an angle, rather than vertically, to obtain maximum strength and resistance.

Designed specifically to move during a major earthquake, the Skyway features several state-of-the-art seismic safety innovations, including 60-foot-long hinge pipe beams. These beams will allow deck segments on the Skyway to move, enabling the deck to withstand greater motion and to absorb more earthquake energy.



Overview of the Skyway and the Temporary Support Structures with the Shear-Leg Barge Crane Lifting Roadway Boxes or Orthotropic Box Girders (OBG) into Place

# San Francisco-Oakland Bay Bridge East Span Replacement Project Oakland Touchdown

When completed, the Oakland Touchdown (OTD) structures will connect Interstate 80 in Oakland to the new side-by-side decks of the new East Span. For westbound drivers, the OTD will be their introduction to the graceful new East Span. For eastbound drivers from San Francisco, this section of the bridge will carry them from the Skyway to the East Bay, offering unobstructed views of the Oakland hills.

The OTD will be constructed through two contracts. The first contract will build the new westbound lanes, as well as part of the eastbound lanes. The second contract to complete the eastbound lanes cannot fully begin until westbound traffic is shifted onto the new bridge. This enables a portion of the upper deck of the existing bridge to be demolished allowing for a smooth transition for the new eastbound lanes in Oakland.

### Contract Oakland Touchdown #1 Contract

Contractor: MCM Construction, Inc. Approved Capital Outlay Budget: \$212.0 M Status: Completed June 2010

The OTD #1 contract constructs the entire 1,000-footlong westbound approach from the toll plaza to the Skyway. When completed, the westbound approach structure will provide direct access to the westbound Skyway. In the eastbound direction, the contract will construct a portion of the eastbound structure and all of the eastbound foundations that are not in conflict with the existing bridge.

**Status:** MCM Construction, Inc. completed OTD #1 westbound and eastbound phase 1 on June 8, 2010.

### G Oakland Touchdown #2 Contract

Contractor: TBD

Approved Capital Outlay Budget: \$62.0 M

Status: In Design

The OTD #2 contract will complete the eastbound approach structure from the end of the Skyway to Oakland. This work is critical to the eastbound opening of the new bridge, but cannot be completed until westbound traffic has been shifted off the existing upper deck to the new SAS bridge.



Overview of Oakland Touchdown #1 Project Status Looking West

# San Francisco-Oakland Bay Bridge East Span Replacement Project Other Contracts

A number of contracts needed to relocate utilities, clear areas of archeological artifacts, and prepare areas for future work have already been completed. The last major contract will be the eventual demolition and removal of the existing bridge, which by that time will have served the Bay Area for nearly 80 years. Following is a status of some the other East Span contracts.



**Archeological Investigations** 

### **East Span Interim Seismic Retrofit**

Contractors: 1) California Engineering

2) Balfour Beatty
apital Outlay Budget: \$30 8

Approved Capital Outlay Budget: \$30.8 M Status: Completed October 2000

After the 1989 Loma Prieta Earthquake, and before the final retrofit strategy was determined for the East Span, Caltrans completed an interim retrofit of the existing bridge to prevent a catastrophic collapse of the bridge should a similar earthquake occur before the East Span was completely replaced. The interim retrofit was performed under two separate contracts that lengthened pier seats, added some structural members, and strengthened areas of the bridge so they would be more resilient during an earthquake.

### **Stormwater Treatment Measures**

Contractor: Diablo Construction, Inc.
Approved Capital Outlay Budget: \$18.3 M
Status: Completed December 2008

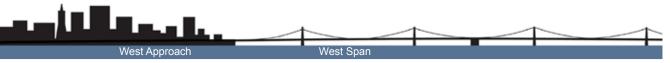
The Stormwater Treatment Measures contract implemented a number of best practices for the management and treatment of stormwater runoff. Focused on the areas around and approaching the toll plaza, the contract added new drainage and built new bio-retention swales and other related constructs.



Existing East Span of the San Francisco-Oakland Bay Bridge



**Stormwater Retention Basin** 



### Yerba Buena Island Substation

Contractor: West Bay Builders

Approved Capital Outlay Budget: \$11.6 M

Status: Completed May 2005

This contract relocated an electrical substation just east of the Yerba Buena Island Tunnel in preparation for the new East Span.

### **Pile Installation Demonstration**

Contractor: Manson and Dutra, Joint Venture Approved Capital Outlay Budget: \$9.3 M Status: Completed December 2000

While large-diameter battered piles are common in offshore drilling, the new East Span is one of the first bridges to use them in its foundations. To minimize project risks and build industry knowledge, a pile installation demonstration project was initiated to prove the efficacy of the proposed technology and methodology. The demonstration was highly successful and helped result in zero contract change orders or claims for pile driving on the project.

### H Existing Bridge Demolition

Contractor: TBD

Approved Capital Outlay Budget: \$239.1 M

Status: In Design

Design work on the contract will start in earnest as the opening of the new bridge to traffic approaches.



**New YBI Electrical Substation** 

### | Electrical Cable Relocation

Contractor: Manson Construction
Approved Capital Outlay Budget: \$9.6 M
Status: Completed January 2008

A submerged cable from Oakland that is close to where the new bridge will touch down supplies electrical power to Treasure Island. To avoid any possible damage to the cable during construction, two new replacement cables were run from Oakland to Treasure Island. The extra cable was funded by the Treasure Island Development Authority.

# TOLL BRIDGE SEISMIC RETROFIT PROGRAM Antioch Bridge Seismic Retrofit Project

Contractor: California Engineering Contractors, Inc. Approved Capital Outlay Budget: \$70.0 M Status:13% Complete as of July 2010

Serving the Delta region of the Bay Area, the Antioch Bridge takes State Route 160 traffic over the San Joaquin River, linking eastern Contra Costa County with Sacramento County. The current 1.8-mile-long steel plate girder bridge was opened in 1978 with one lane in each direction. The current retrofit strategy for the bridge includes relatively minor modifications to the approach structure on Sherman Island, the addition of isolation bearings and strengthening of the columns and hinge retrofits.

**Status:** The first working day of the project was July 13, 2010 and the contractor has completed building trestle #2 adjacent to State Route 160 and will begin with trestle #1 by July 27th. Work with the temporary roadway #2 at Sherman Island between Piers 22 and 38 is complete and 90 percent of the curtain wall has been removed at the slab span bridge. The remaining panels will be removed close to the end of the project.



All Piers Will Have Scaffolding Installed to Provide Access to Bent Caps

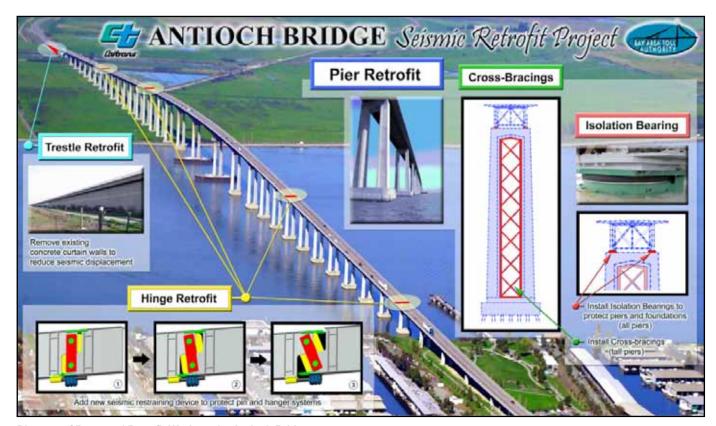


Diagram of Proposed Retrofit Work on the Antioch Bridge



Temporary Access Road on Sherman Island



Environmental Fencing Installed for Erosion Control and to Restrict Species from Entering Site

### **Dumbarton Bridge Seismic Retrofit Project**

Contractor: TBD

Approved Capital Outlay Budget: \$270.0 M

Status: Awarded

The current Dumbarton Bridge was opened to traffic in 1982 linking the cities of Newark in Alameda County and East Palo Alto in San Mateo County. The 1.6-mile long bridge has six lanes (three in each direction) and an eight-foot bicycle/pedestrian pathway. The bridge is a combination of reinforced concrete and steel girders that support a reinforced lightweight concrete roadway on reinforced concrete columns. The current retrofit strategy for the bridge includes superstructure and deck modifications and installation of isolation bearings.

**Status:** Bids for the Dumbarton Bridge Seismic Retrofit were opened on June 15, 2010. The lowest bids were substantially lower than the engineer's estimate. Caltrans awarded the contract to Shimmick Construction of Oakland in the first week of August 2010. Because of the low bid, the TBPOC is forecasting a reduction of more than \$200 million for the project.



**Dumbarton Bridge** 

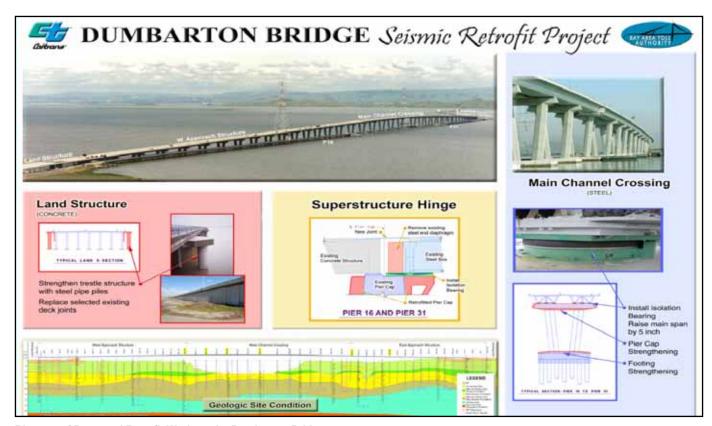


Diagram of Proposed Retrofit Work on the Dumbarton Bridge



# TOLL BRIDGE SEISMIC RETROFIT PROGRAM Other Completed Projects

In the 1990s, the State Legislature identified seven of the nine state-owned toll bridges for seismic retrofit. In addition to the San Francisco-Oakland Bay Bridge, these included the Benicia-Martinez, Carquinez, Richmond-San Rafael and San Mateo-Hayward bridges in the Bay Area, and the Vincent Thomas and Coronado bridges in Southern California. Other than the East Span of the Bay Bridge, the retrofits of all of the bridges have been completed as planned.

### San Mateo-Hayward Bridge Seismic Retrofit Project Project Status: Completed 2000

The San Mateo-Hayward Bridge seismic retrofit project focused on strengthening the high-rise portion of the span. The foundations of the bridge were significantly upgraded with additional piles.

### 1958 Carquinez Bridge Seismic Retrofit Project Project Status: Completed 2002

The eastbound 1958 Carquinez Bridge was retrofitted in 2002 with additional reinforcement of the cantilever thrutruss structure.

### 1962 Benicia-Martinez Bridge Seismic Retrofit Project Project Status: Completed 2003

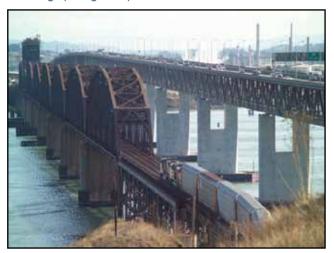
The southbound 1962 Benicia-Martinez Bridge was retrofitted to "Lifeline" status with the strengthening of the foundations and columns and the addition of seismic bearings that allow the bridge to move during a major seismic event. The Lifeline status means the bridge is designed to sustain minor to moderate damage after an event and to reopen quickly to emergency response traffic.



High-Rise Section of San Mateo-Hayward Bridge



1958 Carquinez Bridge (foreground) with the 1927 Span (middle) under Demolition and the New Alfred Zampa Memorial Bridge (background)



1962 Benicia-Martinez Bridge (right)

### Richmond-San Rafael Bridge Seismic Retrofit Project Project Status: Completed 2005

The Richmond-San Rafael Bridge was retrofitted to a "No Collapse" classification to avoid catastrophic failure during a major seismic event. The foundations, columns, and truss of the bridge were strengthened, and the entire low-rise approach viaduct from Marin County was replaced.



Richmond-San Rafael Bridge

### Los Angeles-Vincent Thomas Bridge Seismic Retrofit Project Project Status: Completed 2000

The Vincent Thomas Bridge is a 1,500-foot long suspension bridge crossing the Los Angeles Harbor in Los Angeles that links San Pedro with Terminal Island. The bridge was one of two state-owned toll bridges in Southern California (the other being the San Diego-Coronado Bridge). Opened in 1963, the bridge was seismically retrofitted as part of the TBSRP in 2000.



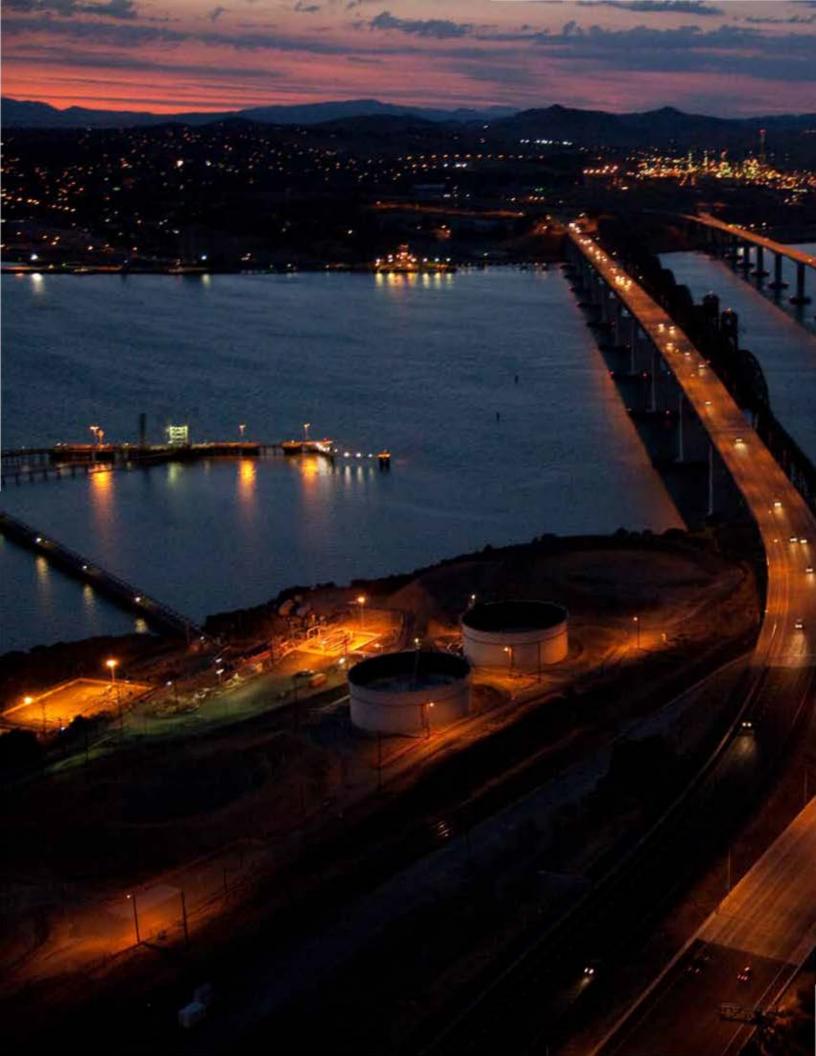
Los Angeles-Vincent Thomas Bridge

### San Diego-Coronado Bridge Seismic Retrofit Project Project Status: Completed 2002

The San Diego-Coronado Bridge crosses over San Diego Bay and links the cities of San Diego and Coronado. Opened in 1969, the 2.1-mile long bridge was seismically retrofitted as part of the Toll Bridge Seismic Retrofit Project in 2002.



San Diego-Coronado Bridge



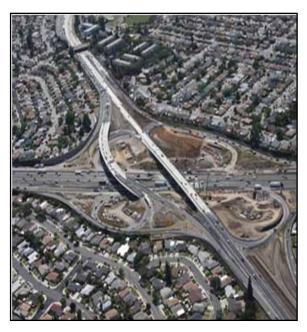
# REGIONAL MEASURE 1 TOLL BRIDGE PROGRAM

### **REGIONAL MEASURE 1 PROGRAM**

# Interstate 880/State Route 92 Interchange Reconstruction Project Project Status: In Construction

The Interstate 880/State Route 92 Interchange Reconstruction Project is the final project under the Regional Measure 1 Toll Bridge Program. Project completion fulfills a promise made to Bay Area voters in 1988 to deliver a slate of projects that help expand bridge capacity and improve safety on the bridges.

This corridor is consistently one of the Bay Area's most congested during the evening commute. This is due in part to the lane merging and weaving that is required by the existing cloverleaf interchange. The new interchange will feature direct freeway-to-freeway connector ramps that will increase traffic capacity and improve overall safety and traffic operations in the area. With the new direct-connector ramps, drivers coming off the San Mateo-Hayward Bridge can access Interstate 880 without having to compete with traffic headed onto east Route 92 from south Interstate 880 (see progress photos on pages 74 and 75).



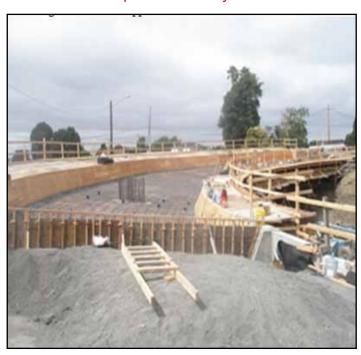
Overview of Progress of 92/880

# Interstate 880/State Route 92 Interchange Reconstruction Contract

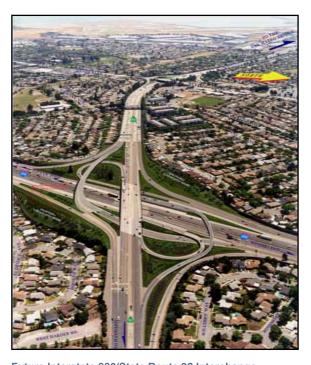
Contractor: Flatiron/Granite

Approved Capital Outlay Budget: \$158.0 M

Status: 74% Complete as of July 2010



92/880 Drainage System 15 in Progress



Future Interstate 880/State Route 92 Interchange (as simulated) Looking West toward San Mateo

### Stage 1 – Construct East Route 92 to North Interstate 880 Connector

The new east Route 92 to north Interstate 880 connector (ENCONN) is the most critical fly over structure for relieving congestion in the corridor. The ENCONN will be first used as a detour to allow for future stages of work, while keeping traffic flowing.

**Status:** ENCONN was completed and opened to detour traffic on May 16, 2009.

## Stage 2 – Replace South Side of Route 92 Separation Structure

By detouring eastbound Route 92 traffic onto ENCONN, the existing separation structure that carries SR92 over I-880 can be replaced. The existing structure will be cut lengthwise, and then demolished and replaced separately. In this stage, the south side of the structure will be replaced, while west Route 92 and south-Interstate-880-to-east-Route-92 traffic will stay on the remaining structure.

**Status:** Work on the south side of the separation structure is complete.

### Stage 3 – Replace North Side of Route 92 Separation Structure

Upon completion of Stage 2, the existing north side of the separation structure will be demolished and replaced. Its traffic will then be shifted onto the newly reconstructed south side.

**Status:** The demolition of the existing westbound separation structure (north side) was completed on May 5, 2010. The north side structure is forecast to be complete in March of 2011.

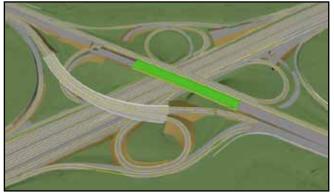
### Stage 4 – Final Realignment and Other Work

In addition to ENCONN and the separation structure, direct north 880 to west 92 connector (NWCONN) and west 92 to south 880 connector (WSCONN) remain to be completed along with a new Eldridge Avenue Pedestrian Overcrossing and new Calaroga Avenue Overcrossing.

Status: The NWCONN structure is approximately 50 percent complete while the WSCONN structure is approximately 30 percent complete. The new Eldridge Avenue pedestrian overcrossing will be opened in August 2010 and is currently 85 percent complete. A new pump station for the interchange is also in construction and scheduled to be completed in August 2010. A temporary Calaroga Avenue Bridge widening was completed in January 2010 to allow for stage construction of a new Caloroga Avenue Bridge. The left Calaroga Avenue is approximately 75 percent complete and is forecast to be complete in August 2010. Upon completion of the left bridge the right bridge will be constructed and is forecast to be complete the first quarter of 2011.



Stage 1 - Construct East Route 92 to North Interstate 880 Direct Connector



Stage 2 - Demolish and Replace South Side of Route 92 Separation Structure



Stage 3 - Demolish and Replace North Side of Route 92 Separation Structure



Stage 4 - Final Realignment and Other Work

# REGIONAL MEASURE 1 PROGRAM Other Completed Projects

# San Mateo-Hayward Bridge-Widening Project Project Status: Completed 2003

This project expanded the low-rise concrete trestle section of the San Mateo-Hayward Bridge to allow for three lanes in each direction to match the existing configuration of the high-rise steel section of the bridge.



Widening of the San Mateo-Hayward Bridge Trestle on Left

# Richmond-San Rafael Bridge Rehabilitation Projects Project Status: Completed 2006

Two major rehabilitation projects for the Richmond-San Rafael Bridge were funded and completed:

(1) replacement of the western concrete approach trestle and ship-collision protection fender system; and (2) rehabilitation of deck joints and resurfacing of the bridge deck.

In 2005, along with the seismic retrofit of the bridge, the trestle and fender replacement work was completed as part of the same project. Under a separate contract in 2006, the bridge was resurfaced with a polyester concrete overlay along with the repair of numerous deck joints.



New Richmond-San Rafael Bridge West Approach Trestle under Construction

# Richmond Parkway Construction Project Project Status: Completed 2001

The final connections to the Richmond Parkway from Interstate 580 near the Richmond-San Rafael Bridge were completed in May 2001.

## New Alfred Zampa Memorial (Carquinez) Bridge Project Project Status: Completed 2003



New Alfred Zampa Memorial (Carquinez) Bridge Soon after Opening to Traffic, with Crockett Interchange Still under Construction

The new western span of the Carquinez Bridge, which replaced the original 1927 span, is a twin-towered suspension bridge with three mixed-flow lanes, a new carpool lane shoulders and a bicycle and pedestrian pathway.

## **Benicia-Martinez Bridge Project Project Status: Completed 2009**

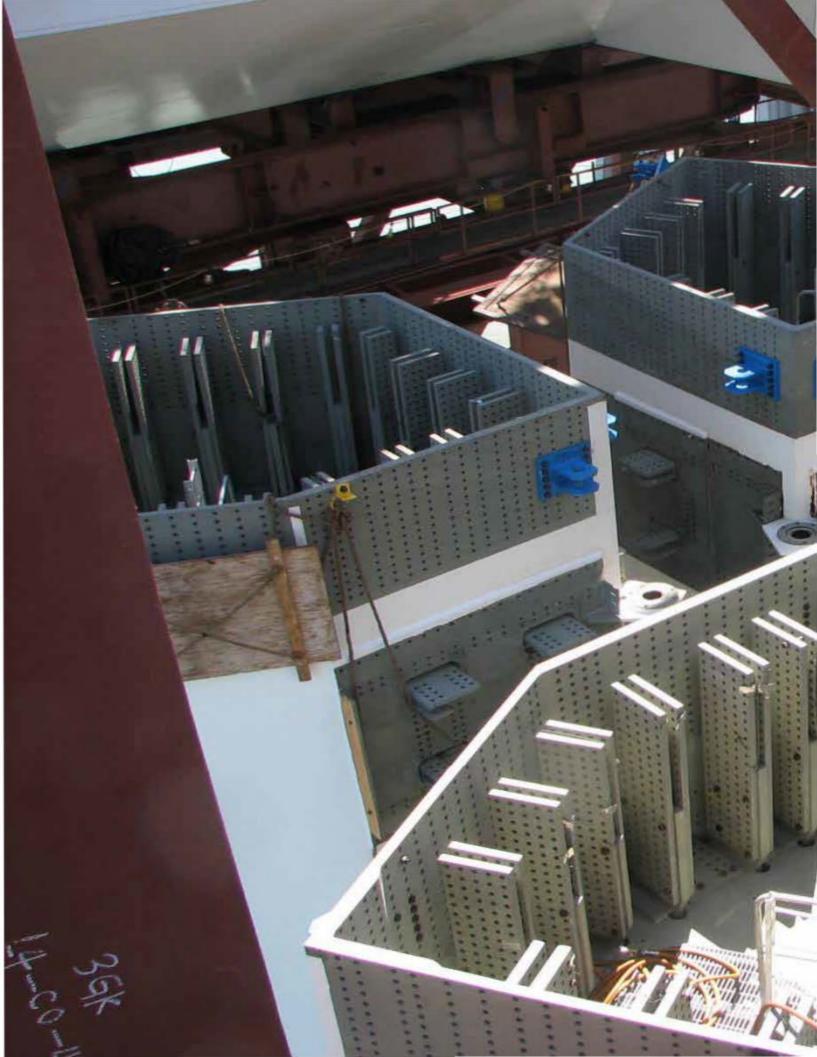


Benicia-Martinez Bridge Pedestrian/Bicycle Pathway Opened to the Public in August 2009

A two-year project to rehabilitate and reconfigure the original Benicia-Martinez Bridge began shortly after the opening of the new Congressman George Miller Bridge. The existing 1.2-mile roadway surface on the steel deck truss bridge was modified to carry four lanes of southbound traffic (one more than before)—with shoulders on both sides—plus a bicycle/pedestrian path on the west side of the span that connects to Park Road in Benicia and to Marina Vista Boulevard in Martinez. Reconstruction of the east side of the bridge and approaches was completed in August 2008 and reconstruction of the west side of the bridge an approaches and construction of the bicycle/pedestrian pathway was completed in August 2009.

## **Bayfront Expressway (State Route 84) Widening Project Project Status: Completed 2004**

This project expanded and improved the roadway from the Dumbarton Bridge touchdown to the US 101/Marsh Road interchange by adding additional lanes and turn pockets and improving bicycle and pedestrian access in the area.





## Appendix A-1: TBSRP AB 144/SB 66 Baseline Budget, Forecasts and Expenditures through July 31, 2010 (\$ Millions)

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (06/2010)	Cost to Date (06/2010)	Cost Forecast (06/2010)	At- Completion Variance
a	С	d	e = c + d	f	g	h = g - e
CEORD Foot Coop Douboomont Duringt						
SFOBB East Span Replacement Project	050.3	202.0	1,162.3	050 0	1,272.2	100.0
Capital Outlay Support	959.3 4,492.2	203.0 203.8	•	858.0	•	109.9 309.8
Capital Outlay Construction	•		4,696.0	3,397.3	5,005.8	
Other Budgeted Capital	35.1	(3.3)	31.8	0.7	7.7	(24.1)
Total	5,486.6	403.5	5,890.1	4,256.0	6,285.7	395.6
SFOBB West Approach Replacement	400.0	(0.0)	440.0	447.5	440.5	0.5
Capital Outlay Support	120.0	(2.0)	118.0	117.5	118.5	0.5
Capital Outlay Construction	309.0	41.7	350.7	328.0	338.1	(12.6)
Total	429.0	39.7	468.7	445.5	456.6	(12.1)
SFOBB West Span Retrofit						•
Capital Outlay Support	75.0	(0.2)	74.8	74.9	74.8	-
Capital Outlay Construction	232.9	(5.5)	227.4	227.4	227.4	-
Total	307.9	(5.7)	302.2	302.3	302.2	-
Richmond-San Rafael Bridge Retrofit*						
Capital Outlay Support	134.0	(7.0)	127.0	126.8	127.0	-
Capital Outlay Construction	780.0	(90.5)	689.5	667.5	689.5	-
Total	914.0	(97.5)	816.5	794.3	816.5	-
Benicia-Martinez Bridge Retrofit						-
Capital Outlay Support	38.1	-	38.1	38.1	38.1	-
Capital Outlay Construction	139.7	-	139.7	139.7	139.7	-
Total	177.8	-	177.8	177.8	177.8	-
Carquinez Bridge Retrofit						
Capital Outlay Support	28.7	0.1	28.8	28.8	28.8	-
Capital Outlay Construction	85.5	(0.1)	85.4	85.4	85.4	-
Total	114.2	-	114.2	114.2	114.2	-
San Mateo-Hayward Retrofit						-
Capital Outlay Support	28.1	_	28.1	28.1	28.1	-
Capital Outlay Construction	135.4	(0.1)	135.3	135.3	135.3	-
Total	163.5	(0.1)	163.4	163.4	163.4	
Vincent Thomas Bridge Retrofit (Los Angeles)		(- /				
Capital Outlay Support	16.4	-	16.4	16.4	16.4	_
Capital Outlay Construction	42.1	(0.1)	42.0	42.0	42.0	-
Total	58.5	(0.1)	58.4	58.4	58.4	
San Diego-Coronado Bridge Retrofit	00.0	(0.1)	00.7	70.7	70.7	_
Capital Outlay Support	33.5	(0.3)	33.2	33.2	33.2	_
Capital Outlay Support	70.0	(0.6)	69.4	69.4	69.4	_
Total	103.5	(0.9)	102.6	102.6	102.6	-

## Appendix A-1: TBSRP AB 144/SB 66 Baseline Budget, Forecasts and Expenditures through July 31, 2010 (\$ Millions) Cont.

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (06/2010)	Cost to Date (06/2010)	Cost Forecast (06/2010)	At- Completion Variance
a	С	d	e = c + d	f	g	h = g - e
Antioch Bridge						
Capital Outlay Support	-	31.0	31.0	9.6	35.5	4.5
Capital Outlay Support by BATA				6.2		
Capital Outlay Construction	-	70.0	70.0	-	62.5	(7.5)
Total	-	101.0	101.0	15.8	98.0	(3.0)
Dumbarton Bridge						
Capital Outlay Support	-	95.0	95.0	15.9	56.0	(39.0)
Capital Outlay Support by BATA				6.0		
Capital Outlay Construction	-	270.0	270.0	0.3	92.7	(177.3)
Total	-	365.0	365.0	22.2	148.7	(216.3)
Cubicial Carifal Outley Company	4 422 4	319.6	4 750 7	4 250 5	4 020 6	75.9
Subtotal Capital Outlay Support	1,433.1	488.6	1,752.7	1,359.5	1,828.6	112.4
Subtotal Capital Outlay	6,286.8 35.1		6,775.4	5,092.3	6,887.8	
Subtotal Other Budgeted Capital	30.0	(3.3)	31.8 30.0	0.7 25.5	7.7 30.0	(24.1)
Miscellaneous Program Costs		904.0				164.2
Subtotal Toll Bridge Seismic Retrofit Program	7,785.0	804.9	8,589.9	6,478.0	8,754.1 202.8	202.8
Net Programmatic Risks** Program Contingency	900.0	(101.0)	708.1	•	341.1	
Program Contingency	900.0	(191.9)	/00.1	•	341.1	(367.0)
Total Toll Bridge Seismic Retrofit Program	8,685.0	613.0	9,298.0	6,478.0	9,298.0	

#### Notes

<sup>\*</sup> Budget for Richmond-San Rafael Bridge includes \$16.9 million of deck joint rehabilitation work that considered to be eligible for seismic retrofit program funding.

<sup>\*\*</sup> The Net Programmatic Risks of \$202.8 million is comprised of \$195.8 million program level risks and \$7 million risk reconciliation.

## Appendix A-2: TBSRP AB 144/SB 66 Baseline Budget, Forecasts and Expenditures through July 31, 2010 (\$ Millions)

Bridge	AB 144 Baseline Budget	TBPOC Current Approved Budget	Expenditures to date and Encumbrances as of July 2010 See Note (1)	Estimated Costs not yet spent or Encumbered as of July 2010	Total Forecast as of July 2010
a	b	С	d	е	f = d + e
Other Completed Projects					
Capital Outlay Support	144.9	144.6	144.6	-	144.6
Capital Outlay	472.6	471.9	472.6	(0.8)	471.8
Total	617.5	616.5	617.2	(8.0)	616.4
Rochmond-San Rafael					
Capital Outlay Support	134.0	127.0	126.8	0.2	127.0
Capital Outlay	698.0	689.5	674.1	15.4	689.5
Project Reserves	82.0	-	-	-	-
Total	914.0	816.5	800.9	15.6	816.5
West Span Retrofit					
Capital Outlay Support	75.0	74.8	74.8	-	74.8
Capital Outlay	232.9	227.4	232.9	(5.5)	227.4
Total	307.9	302.2	307.7	(5.5)	302.2
West Approach					
Capital Outlay Support	120.0	118.0	117.6	0.9	118.5
Capital Outlay	309.0	350.7	342.5	(4.4)	338.1
Total	429.0	468.7	460.1	(3.5)	456.6
SFOBB East Span - Skyway					
Capital Outlay Support	197.0	181.2	181.1	0.1	181.2
Capital Outlay	1,293.0	1,254.1	1,368.3	(114.2)	1,254.1
Total	1,490.0	1,435.3	1,549.4	(114.1)	1,435.3
SFOBB East Span - SAS - Superstructure					
Capital Outlay Support	214.6	375.5	244.3	228.0	472.3
Capital Outlay	1,753.7	1,753.7	1,753.7	293.1	2,046.8
Total	1,968.3	2,129.2	1,998.0	521.1	2,519.1
SFOBB East Span - SAS - Foundations					
Capital Outlay Support	62.5	37.6	37.6	-	37.6
Capital Outlay	339.9	307.3	308.7	(1.4)	307.3
Total	402.4	344.9	346.3	(1.4)	344.9
Small YBI Projects					
Capital Outlay Support	10.6	10.6	10.2	0.4	10.6
Capital Outlay	15.6	15.6	16.6	(0.9)	15.7
Total	26.2	26.2	26.8	(0.5)	26.3
YBI Detour				, ,	
Capital Outlay Support	29.5	90.7	83.8	6.3	90.1
Capital Outlay	131.9	492.8	493.1	(3.7)	489.4
Total	161.4	583.5	576.9	2.6	579.5
YBI- Transition Structures					
Capital Outlay Support	78.7	106.4	16.4	99.8	116.2
Capital Outlay	299.4	206.3	125.9	112.5	238.4
Total	378.1	312.7	142.3	212.3	354.6

### Appendix A-2: TBSRP AB 144/SB 66 Baseline Budget, Forecasts and Expenditures through July 31, 2010 (\$ Millions) Cont.

			English to date		
Contract	AB 144 Baseline Budget	TBPOC Current Approved Budget	Expenditures to date and Encumbrances as of July 2010 see Note (1)	Estimated Costs not yet spent or Encumbered as of July 2010	Total Forecast as of July 2010
a	b	С	d	е	f = d + e
Oakland Touchdown					
Capital Outlay Support	74.4	93.9	77.2	18.0	95.2
Capital Outlay	283.8	288.0	218.0	64.1	282.1
Total	358.2	381.9	295.2	82.1	377.3
East Span Other Small Projects					
Capital Outlay Support	212.3	206.5	214.2	(7.6)	206.6
Capital Outlay	170.8	170.8	94.0	52.6	146.6
Total	383.1	377.3	308.2	45.0	353.2
<b>Existing Bridge Demolition</b>					
Capital Outlay Support	79.7	59.9	0.4	62.0	62.4
Capital Outlay	239.2	239.1	-	233.0	233.0
Total	318.9	299.0	0.4	295.0	295.4
Antioch Bridge					
Capital Outlay Support	-	31.0	9.8	19.5	29.3
Capital Outlay Support by BATA			6.2	-	6.2
Capital Outlay	-	70.0	47.0	15.5	62.5
Total		101.0	63.0	35.0	98.0
<b>Dumbarton Bridge</b>					
Capital Outlay Support	-	95.0	15.9	34.1	50.0
Capital Outlay Support by BATA			6.0	-	6.0
Capital Outlay	-	270.0	0.3	92.4	92.7
Total		365.0	22.2	126.5	148.7
Miscellaneous Program Costs	30.0	30.0	25.5	4.5	30.0
Total Capital Outlay Support	1,463.2	1,782.7	1,392.4	466.2	1,858.6
Total Capital Outlay	6,321.8	6,807.2	6,147.7	747.8	6,895.5
Program Total	7,785.0	8,589.9	7,540.1	1,214.0	8,754.1

Funds allocated to project or contract for Capital Outlay and Support needs includes Capital Outlay Support total allocation for FY 06/07.
 BSA provided a distribution of program contingency in December 2004 based in Bechtel Infrastructure Corporation input.
 This Column is subject to revision upon completion of Department's risk assessment update.

<sup>(3)</sup> Total Capital Outlay Support includes program indirect costs.

## Appendix B: TBSRP (SFOBB East Span Only) AB 144/SB 66 Baseline Budget, Forecasts and Expenditures through July 31, 2010 (\$ Millions)

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (06/2010)	Cost to Date (06/2010)	Cost Forecast (06/2010)	At- Completion Variance
a	С	d	e = c + d	f	g	h = g - e
San Francisco-Oakland Bay Bridge East Span Replacement Project						
East Span - SAS Superstructure						
Capital Outlay Support	214.6	160.9	375.5	238.4	472.3	96.8
Capital Outlay Construction	1,753.7	-	1,753.7	1,054.0	2,046.8	293.1
Total	1,968.3	160.9	2,129.2	1,292.4	2,519.1	389.9
SAS W2 Foundations						
Capital Outlay Support	10.0	(0.8)	9.2	9.2	9.2	-
Capital Outlay Construction	26.4	-	26.4	26.4	26.4	-
Total	36.4	(0.8)	35.6	35.6	35.6	-
YBI South/South Detour						
Capital Outlay Support	29.4	61.3	90.7	83.3	90.1	(0.6)
Capital Outlay Construction	131.9	360.9	492.8	452.8	489.4	(3.4)
Total	161.3	422.2	583.5	536.1	579.5	(4.0)
East Span - Skyway						
Capital Outlay Support	197.0	(15.8)	181.2	181.2	181.2	-
Capital Outlay Construction	1,293.0	(38.9)	1,254.1	1,236.9	1,254.1	-
Total	1,490.0	(54.7)	1,435.3	1,418.1	1,435.3	-
East Span - SAS E2/T1 Foundations	_					-
Capital Outlay Support	52.5	(24.1)	28.4	28.4	28.4	-
Capital Outlay Construction	313.5	(32.6)	280.9	274.8	280.9	-
Total	366.0	(56.7)	309.3	303.2	309.3	
YBI Transition Structures (see notes below)						
Capital Outlay Support	78.7	27.7	106.4	32.5	116.2	9.8
Capital Outlay Construction	299.3	(93.0)	206.3	12.3	238.4	32.1
Total	378.0	(65.3)	312.7	44.8	354.6	41.9
* YBI- Transition Structures			40.4			
Capital Outlay Support			16.4	16.4	16.5	0.1
Capital Outlay Construction			-	-	-	-
Total			16.4	16.4	16.5	0.1
* YBI- Transition Structures Contract No. 1			^	44.0	^	
Capital Outlay Support			57.0	11.2	65.7	8.7
Capital Outlay Construction			144.0	12.3	164.3	20.3
Total			201.0	23.5	230.0	29.0
* YBI- Transition Structures Contract No. 2						4.0
Capital Outlay Support			32.0	4.8	33.0	1.0
Capital Outlay Construction			59.0	-	70.8	11.8
Total			91.0	4.8	103.8	12.8
* YBI- Transition Structures Contract No. 3 Landscape			4.0		4.0	
Capital Outlay Support			1.0	-	1.0	-
Capital Outlay Construction			3.3	-	3.3	-
Total			4.3	-	4.3	-

## Appendix B: TBSRP (SFOBB East Span Only) AB 144/SB 66 Baseline Budget, Forecasts and Expenditures through July 31, 2010 (\$ Millions) Cont.

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (06/2010)	Cost to Date (06/2010)	Cost Forecast (06/2010)	At- Completion Variance
Ookland Touchdown (see notes helew	С	d	e = c + d	f	g	h = g - e
Oakland Touchdown (see notes below	74.4	19.5	93.9	76.6	95.2	1.3
Capital Outlay Support	283.8	4.2	288.0	208.7	95.2 282.1	(5.9)
Capital Outlay Construction Total	358.2	23.7	381.9	285.3	377.3	(3.9) (4.6)
*OTD Prior-to-Split Costs	330.2	23.1	301.9	203.3	311.3	(4.0)
Capital Outlay Support			21.7	20.1	21.7	
Capital Outlay Support  Capital Outlay Construction			21.7	20.1	21.7	
Total			21.7	20.1	21.7	_
*OTD Submarine Cable			21.1	20.1	21.7	-
Capital Outlay Support			0.9	0.9	0.9	_
Capital Outlay Construction			9.6	7.9	9.6	_
Total			10.5	8.8	10.5	
*OTD No.1 (Westbound)			10.0	0.0	10.0	
Capital Outlay Support			47.3	47.7	47.6	0.3
Capital Outlay Construction			212.0	200.8	208.9	(3.1)
Total			259.3	248.5	256.5	(2.8)
*OTD No.2 (Eastbound)						(=.0)
Capital Outlay Support			22.5	7.2	23.5	1.0
Capital Outlay Construction			62.0	-	59.2	(2.8)
Total			84.5	7.2	82.7	(1.8)
*OTD Electrical Systems						` '
Capital Outlay Support			1.5	0.8	1.5	-
Capital Outlay Construction			4.4	-	4.4	-
Total			5.9	0.8	5.9	
Existing Bridge Demolition						
Capital Outlay Support	79.7	(19.8)	59.9	0.4	62.4	2.5
Capital Outlay Construction	239.2	(0.1)	239.1	-	233.0	(6.1)
Total	318.9	(19.9)	299.0	0.4	295.4	(3.6)
YBI/SAS Archeology						
Capital Outlay Support	1.1	-	1.1	1.1	1.1	-
Capital Outlay Construction	1.1	-	1.1	1.1	1.1	-
Total	2.2		2.2	2.2	2.2	-
YBI - USCG Road Relations						
Capital Outlay Support	3.0	-	3.0	2.7	3.0	-
Capital Outlay Construction	3.0	-	3.0	2.8	3.0	-
Total	6.0		6.0	5.5	6.0	-
YBI - Substation and Viaduct						
Capital Outlay Support	6.5	-	6.5	6.4	6.5	-
Capital Outlay Construction	11.6	-	11.6	11.3	11.6	-
Total	18.1		18.1	17.7	18.1	-
Oakland Geofill						-
Capital Outlay Support	2.5	-	2.5	2.5	2.5	-
Capital Outlay Construction	8.2	-	8.2	8.2	8.2	-
Total	10.7		10.7	10.7	10.7	-

## Appendix B: TBSRP (SFOBB East Span Only) AB 144/SB 66 Baseline Budget, Forecasts and Expenditures through July 31, 2010 (\$ Millions) Cont.

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (06/2010)	Cost to Date (06/2010)	Cost Forecast (06/2010)	At- Completion Variance
a	С	d	e = c + d	f	g	h = g - e
Pile Installation Demonstration Project						
Capital Outlay Support	1.8	-	1.8	1.8	1.8	-
Capital Outlay Construction	9.3	-	9.3	9.2	9.3	-
Total	11.1		11.1	11.0	11.1	-
Stormwater Treatment Measures						
Capital Outlay Support	6.0	2.2	8.2	8.1	8.2	-
Capital Outlay Construction	15.0	3.3	18.3	16.7	18.3	-
Total	21.0	5.5	26.5	24.8	26.5	-
Right-of-Way and Environmental Mitigation						
Capital Outlay Support	-	-	-	-	-	-
Capital Outlay & Right-of-Way	72.4	-	72.4	51.3	72.4	-
Total	72.4	-	72.4	51.3	72.4	-
Sunk Cost - Existing East Span Retrofit						
Capital Outlay Support	39.5	-	39.5	39.5	39.5	-
Capital Outlay Construction	30.8	-	30.8	30.8	30.8	-
Total	70.3	-	70.3	70.3	70.3	-
Other Capital Outlay Support						
Environmental Phase	97.7	-	97.7	97.8	97.7	-
Pre-Split Project Expenditures	44.9	-	44.9	44.9	44.9	-
Non-project Specific Costs	20.0	(8.0)	12.0	3.2	12.0	-
Total	162.6	(8.0)	154.6	145.9	154.6	
Subtotal Capital Outlay Support	959.3	203.0	1,162.3	858.0	1,272.2	109.9
Subtotal Capital Outlay Construction	4,492.2	203.8	4,696.0	3,397.3	5,005.8	309.8
Other Budgeted Capital	35.1	(3.3)	31.8	0.7	7.7	(24.1)
Total SFOBB East Span Replacement Project	5,486.6	403.5	5,890.1	4,256.0	6,285.7	395.6

### **Appendix C: Regional Measure 1 Program Cost Detail (\$ Millions)**

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (06/2010)	Cost to Date (06/2010)	Cost Forecast (06/2010)	At- Completion Variance
a	C	d	e = c + d	f	g	h = g - e
Nov. Double Markings Dridge Ducket						
New Benicia-Martinez Bridge Project New Bridge						
Capital Outlay Support						
BATA Funding	84.9	6.9	91.8	91.9	91.9	0.1
Non-Bata Funding	-	0.1	0.1	0.1	0.1	-
Subtotal	84.9	7.0	91.9	92.0	92.0	0.1
Capital Outlay Construction			-			-
BATA Funding	661.9	94.6	756.5	753.8	756.5	-
Non-Bata Funding	10.1	-	10.1	10.1	10.1	-
Subtotal	672.0	94.6	766.6	763.9	766.6	-
Total	756.9	101.6	858.5	855.9	858.6	0.1
I-680/I-780 Interchange Reconstruction						
Capital Outlay Support						
BATA Funding	24.9	5.2	30.1	30.1	30.1	-
Non-Bata Funding	1.4	5.2	6.6	6.3	6.6	-
Subtotal	26.3	10.4	36.7	36.4	36.7	-
Capital Outlay Construction	547	00.0	04.0	77.4	04.0	
BATA Funding	54.7	26.9	81.6	77.1	81.6	- 0.4
Non-Bata Funding	21.6	-	21.6	21.7	21.7	0.1
Subtotal Total	76.3 <b>102.6</b>	26.9 <b>37.3</b>	103.2 139.9	98.8 <b>135.2</b>	103.3 <b>140.0</b>	0.1
I-680/Marina Vista Interchange Reconstruction	102.0	31.3	139.9	135.2	140.0	0.1
Capital Outlay Support	18.3	1.8	20.1	20.2	20.2	0.1
Capital Outlay Support Capital Outlay Construction	51.5	4.9	56.4	56.1	56.4	-
Total	69.8	6.7	76.5	76.3	76.6	0.1
New Toll Plaza and Administration Building	00.0	V.1	10.0	7 0.0	70.0	0.1
Capital Outlay Support	11.9	3.8	15.7	15.7	15.7	_
Capital Outlay Construction	24.3	2.0	26.3	25.1	26.3	-
Total	36.2	5.8	42.0	40.8	42.0	
Existing Bridge & Interchange Modifications						
Capital Outlay Support						
BATA Funding	4.3	13.5	17.8	17.8	17.8	-
Non-Bata Funding	-	0.9	0.9	0.8	0.9	-
Subtotal	4.3	14.4	18.7	18.6	18.7	-
Capital Outlay Construction						
BATA Funding	17.2	32.8	50.0	37.2	50.0	_
Non-Bata Funding		9.5	9.5	-	9.5	_
Subtotal	17.2	42.3	59.5	37.2	59.5	
Total	21.5	42.3 <b>56.7</b>	78.2		78.2	-
Other Contracts	21.3	30.7	10.2	55.8	10.2	
Capital Outlay Support	44.4	(0.0)	0.4	0.4	0.4	
Capital Outlay Support  Capital Outlay Construction	11.4	(2.3)	9.1	9.1	9.1	-
	20.3	3.3	23.6	17.8	23.6	-
Capital Outlay Right-of-Way	20.4	(0.1)	20.3	17.0	20.3	-
Total	52.1	0.9	53.0	43.9	53.0	

### Appendix C: Regional Measure 1 Program Cost Detail (\$ Millions) Cont.

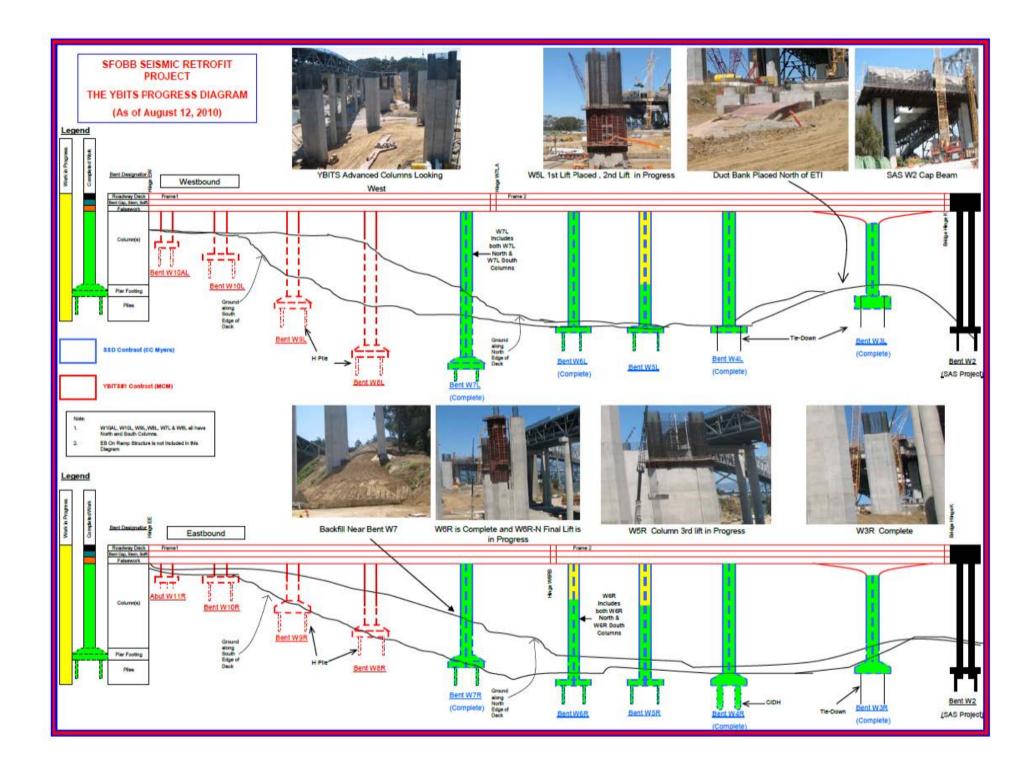
Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (06/2010)	Cost to Date (06/2010)	Cost Forecast (06/2010)	At- Completion Variance
a	С	d	e = c + d	f	g	h = g - e
New Particle Markings Bridge Brain A continued						
New Benicia-Martinez Bridge Project continued	455.7	00.0	404.0	404.0	404.0	0.0
Subtotal BATA Capital Outlay Support	155.7	28.9	184.6	184.8	184.8	0.2
Subtotal BATA Capital Outlay Construction	829.9	164.5	994.4	967.1	994.4	-
Subtotal Capital Outlay Right-of-Way	20.4	(0.1)	20.3	17.0	20.3	-
Subtotal Non-BATA Capital Outlay Support	1.4	6.2	7.6	7.2	7.6	-
Subtotal Non-BATA Capital Outlay Construction	31.7	9.5	41.2	31.8	41.3	0.1
Project Reserves	20.8	3.6	24.4	-	24.1	(0.3)
Total New Benicia-Martinez Bridge Project	1,059.9	212.6	1,272.5	1,207.9	1,272.5	_
Notes:	•			06_,00608_,0060		nenc nnene
Notes.	0060F_,0060G				/3_,0000A_,0	000C_,0000L_,
			•	,		
Carquinez Bridge Replacement Project						
New Bridge						
Capital Outlay Support	60.5	(0.3)	60.2	60.2	60.2	-
Capital Outlay Construction	253.3	2.7	256.0	255.9	256.0	-
Total	313.8	2.4	316.2	316.1	316.2	-
Crockett Interchange Reconstruction						
Capital Outlay Support	32.0	(0.1)	31.9	31.9	31.9	-
Capital Outlay Construction	73.9	(1.9)	72.0	71.9	72.0	-
Total	105.9	(2.0)	103.9	103.8	103.9	-
Existing 1927 Bridge Demolition						
Capital Outlay Support	16.1	(0.5)	15.6	15.7	15.7	0.1
Capital Outlay Construction	35.2	-	35.2	34.8	35.2	-
Total	51.3	(0.5)	50.8	50.5	50.9	0.1
Other Contracts						
Capital Outlay Support	15.8	1.2	17.0	16.4	17.0	-
Capital Outlay Construction	18.8	(1.2)	17.6	16.3	17.6	-
Capital Outlay Right-of-Way	10.5	(0.1)	10.4	9.9	10.4	-
Total	45.1	(0.1)	45.0	42.6	45.0	
Subtotal BATA Capital Outlay Support	124.4	0.3	124.7	124.2	124.8	0.1
Subtotal BATA Capital Outlay Construction	381.2	(0.4)	380.8	378.9	380.8	
Subtotal Capital Outlay Right-of-Way	10.5	(0.1)	10.4	9.9	10.4	-
Project Reserves	12.1	(9.8)	2.3		2.2	(0.1)
Total Carquinez Bridge Replacement Project	528.2	(10.0)	518.2	513.0	518.2	
		, ,				
Notes		_,01303_,0130 )F_,0130G_,01	4_,01305_,01  30H_,0130J_	306_,01307_,013 ,00453_,00493_,		

Appendix C: Regional Measure 1 Program Cost Detail (\$ Millions) Cont.

<b>Contract</b> a	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (06/2010) e = c + d	Cost to Date (06/2010)	Cost Forecast (06/2010)	At- Completion Variance h = g - e
W			<u> </u>		<u> </u>	n g c
Richmond-San Rafael Bridge Trestle. Fender, and Deck Join	t Rehabilitation		See note bel	ow		
Capital Outlay Support						
BATA Funding	2.2	(0.8)	1.4	1.4	1.4	-
Non-BATA Funding	8.6	1.8	10.4	10.4	10.4	-
Subtotal	10.8	1.0	11.8	11.8	11.8	-
Capital Outlay Construction						
BATA Funding	40.2	(6.8)	33.4	33.3	33.4	-
Non-BATA Funding	51.1	-	51.1	51.1	51.1	-
Subtotal	91.3	(6.8)	84.5	84.4	84.5	-
Project Reserves	-	0.8	0.8	-	0.8	-
Total	102.1	(5.0)	97.1	96.2	97.1	
Richmond-San Rafael Bridge Deck Overlay Rehabilitation		, ,				
Capital Outlay Support						
BATA Funding	4.0	(0.7)	3.3	3.3	3.3	-
Non-BATA Funding	4.0	(4.0)	-	-	-	-
Subtotal	8.0	(4.7)	3.3	3.3	3.3	-
Capital Outlay Construction	16.9	(0.6)	16.3	16.3	16.3	-
Project Reserves	0.1	0.3	0.4	-	0.4	-
Total	25.0	(5.0)	20.0	19.6	20.0	
Richmond Parkway Project (RM 1 Share Only)		, ,				
Capital Outlay Support	_	-	-	-	-	-
Capital Outlay Construction	5.9	-	5.9	4.3	5.9	-
Total	5.9		5.9	4.3	5.9	
San Mateo-Hayward Bridge Widening						
Capital Outlay Support	34.6	(0.5)	34.1	34.1	34.1	-
Capital Outlay Construction	180.2	(6.1)	174.1	174.1	174.1	-
Capital Outlay Right-of-Way	1.5	(0.9)	0.6	0.5	0.6	-
Project Reserves	1.5	(0.5)	1.0	-	1.0	-
Total	217.8	(8.0)	209.8	208.7	209.8	-
I-880/SR-92 Interchange Reconstruction		` '				
Capital Outlay Support	28.8	34.6	63.4	54.1	63.4	-
Capital Outlay Construction						
BATA Funding	85.2	66.2	151.4	100.3	151.4	-
Non-BATA Funding	9.6	-	9.6	-	9.6	-
Subtotal	94.8	66.2	161.0	100.3	161.0	-
Capital Outlay Right-of-Way	9.9	7.0	16.9	12.3	16.9	-
Project Reserves	0.3	3.4	3.7	-	3.7	-
Total	133.8	111.2	245.0	166.7	245.0	
Bayfront Expressway Widening						
Capital Outlay Support	8.6	(0.2)	8.4	8.3	8.4	-
Capital Outlay Construction	26.5	(1.5)	25.0	24.9	25.0	-
Capital Outlay Right-of-Way	0.2	-	0.2	0.2	0.2	-
Project Reserves	0.8	(0.3)	0.5	-	0.5	-
Total	36.1	(2.0)	34.1	33.4	34.1	
		()				

### Appendix C: Regional Measure 1 Program Cost Detail (\$ Millions) Cont.

Contract	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (06/2010)	Cost to Date (06/2010)	Cost Forecast (06/2010)	At- Completion Variance		
a	С	d	e = c + d	f	g	h = g - e		
US 101/University Avenue Interchange Modification								
Capital Outlay Support	-	-	-	-	-	-		
Capital Outlay Construction	3.8	-	3.8	3.7	3.8	-		
Total	3.8		3.8	3.7	3.8	-		
Subtotal BATA Capital Outlay Support	358.3	61.6	419.9	410.2	420.2	0.3		
Subtotal BATA Capital Outlay Construction	1,569.8	215.3	1,785.1	1,702.9	1,785.1	-		
Subtotal Capital Outlay Right-of-Way	42.5	5.9	48.4	39.9	48.4	-		
Subtotal Non-BATA Capital Outlay Support	14.0	4.0	18.0	17.6	18.0	-		
Subtotal Non-BATA Capital Outlay Construction	92.4	9.5	101.9	82.9	102.0	0.1		
Project Reserves	35.6	(2.5)	33.1	-	32.7	(0.4)		
Total RM1 Program	2,112.6	293.8	2,406.4	2,253.5	2,406.4	-		
Notes:				ender, and Deck 38U_ and 04157		ilitation		
	2 San Mateo-Hayward Bridge Widening includes EA's 00305_,04501_,04503_,04504_,04504_,04505_,04506_,04507_,04508_,04509_,27740_,27790_,04860							



# Appendix E: Project Progress Photographs Self-Anchored Suspension Bridge Fabrication



Lift 14 - U Rib Deck Panel Fabrication



Lift 2 North



Lift 4 East



West Grillage

# Appendix E: Project Progress Photographs Self-Anchored Suspension Bridge Fabrication (cont.)



Segments of Roadway Box 9 in Trial Assembly Yard



Roadway Box 8 with Crossbeam 9 and 10 and Roadway Box 7 Segments in Background



Roadway Box 9 in Trial Assembly Yard



Roadway Box 8 in Trial Assembly Yard





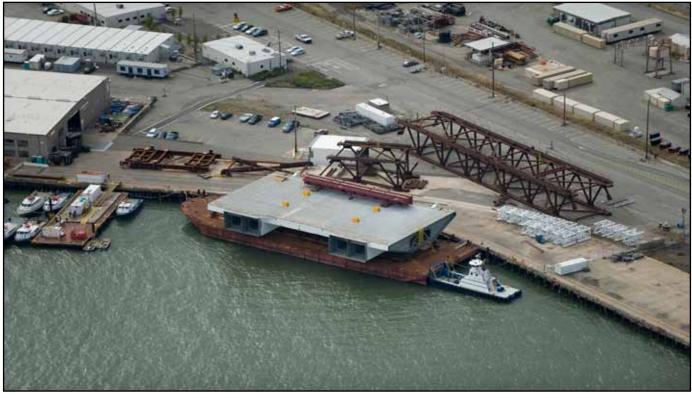
# Appendix E: Project Progress Photographs Self-Anchored Suspension Bridge Field Work



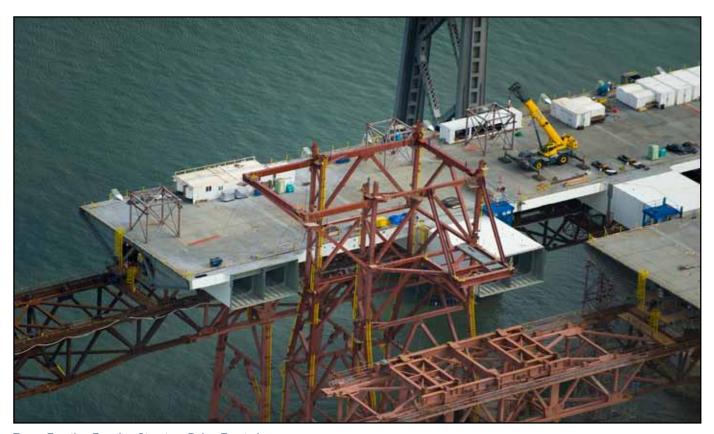
SAS Eastbound and Westbound Roadway Boxes Placed



**Overview of the SAS Construction Progress** 



SAS Sixth Westbound Roadway Box Ready Stored at Pier 7 and Ready for Installation



Tower Erection Framing Structure Being Erected

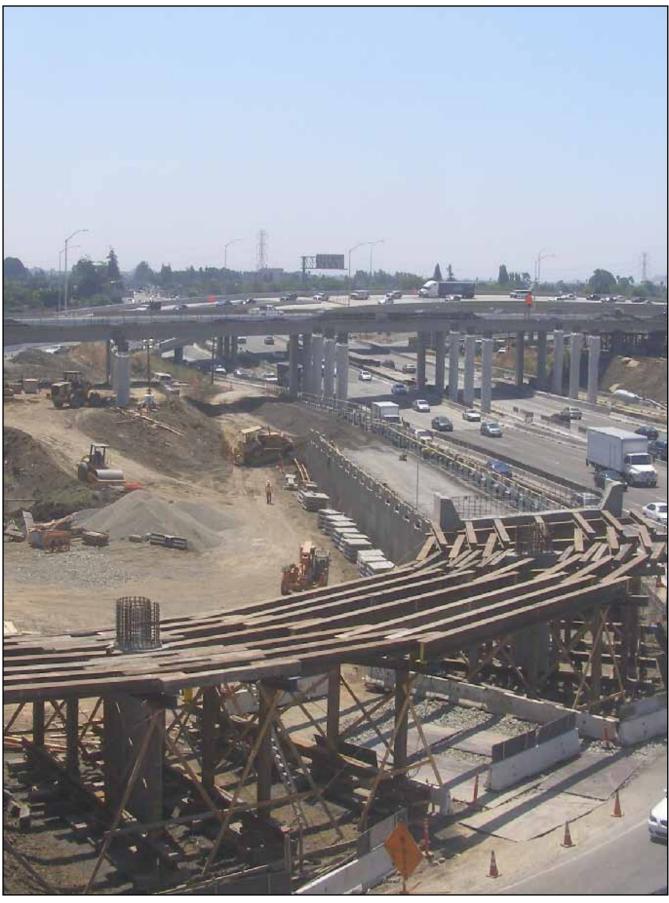
# Appendix E: Project Progress Photographs 92/880 Interchange



Irrigation Crossover at Hesperian Blvd.



**Eldridge Pedestrian Over Crossing** 



Overview of 92/880 Interchange

#### **Appendix F: Glossary of Terms**

### **Glossary of Terms**

AB144/SB 66 BUDGET: The planned allocation of resources for the Toll Bridge Seismic Retrofit Program, or subordinate projects or contracts, as provided in Assembly Bill 144 and Senate Bill 66, signed into law by Governor Schwarzenegger on July 18, 2005 and September 29, 2005, respectively.

BATA BUDGET: The planned allocation of resources for the Regional Measure 1 Program, or subordinate projects or contracts as authorized by the Bay Area Toll Authority as of June 2005.

APPROVED CHANGES: For cost, changes to the AB144/SB 66 Budget or BATA Budget as approved by the Bay Area Toll Authority Commission. For schedule, changes to the AB 144/SB 66 Project Complete Baseline approved by the Toll Bridge Program Oversight Committee, or changes to the BATA Project Complete Baseline approved by the Bay Area Toll Authority Commission.

CURRENT APPROVED BUDGET: The sum of the AB144/SB66 Budget or BATA Budget and Approved Changes.

COST TO DATE: The actual expenditures incurred by the program, project or contract as of the month and year shown.

COST FORECAST: The current forecast of all of the costs that are projected to be expended so as to complete the given scope of the program, project, or contract.

AT COMPLETION VARIANCE or VARIANCE (cost): The mathematical difference between the Cost Forecast and the Current Approved Budget.

AB 144/SB 66 PROJECT COMPLETE BASELINE: The planned completion date for the Toll Bridge Seismic Retrofit Program or subordinate projects or contracts.

BATA PROJECT COMPLETE BASELINE: The planned completion date for the Regional Measure 1 Program or subordinate projects or contracts.

PROJECT COMPLETE CURRENT APPROVED SCHEDULE: The sum of the AB144/SB66 Project Complete Baseline or BATA Project Complete Baseline and Approved Changes.

PROJECT COMPLETE SCHEDULE FORECAST: The current projected date for the completion of the program, project, or contract.

SCHEDULE VARIANCE or VARIANCE (schedule): The mathematical difference expressed in months between the Project Complete Schedule Forecast and the Project Complete Current Approved Schedule.

% COMPLETE: % Complete is based on an evaluation of progress on the project, expenditures to date, and schedule.



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The information in this report is provided in accordance with California Government code Section 755. This document is one of a series of reports prepared for the Bay Area Toll Authority (BATA)/Metropolitan Transportation Commission (MTC) for the Toll Bridge Seismic Retrofit and Regional Measure 1 Programs. The contract value for the monitoring efforts, technical analysis, and field site works that contribute to these reports, as well as the report preparation and production is \$1,574,873.73.











TO: Toll Bridge Program Oversight Committee DATE: August 25, 2010

(TBPOC)

FR: Tony Anziano, Toll Bridge Program Manager, Caltrans

RE: Agenda No. - 4a1

Item- San Francisco-Oakland Bay Bridge Updates Yerba Buena Island (YBI) Detour Update

#### **Recommendation:**

For Information Only

#### Cost:

N/A

#### **Schedule Impacts:**

N/A

#### Discussion:

A verbal update on the Yerba Buena Island Detour contract will be provided at the September 2<sup>nd</sup> meeting.

#### Attachment(s):

N/A



TO: Toll Bridge Program Oversight Committee DATE: August 25, 2010

(TBPOC)

FR: Tony Anziano, Toll Bridge Program Manager, Caltrans

RE: Agenda No. - 4b1

Item- San Francisco-Oakland Bay Bridge Updates

Yerba Buena Island Transition Structures (YBITS) No. 1 Update

#### **Recommendation:**

For Information Only

#### Cost:

N/A

#### **Schedule Impacts:**

N/A

#### Discussion:

A verbal update on the Yerba Buena Island Transition Structures No. 1 contract will be provided at the September 2<sup>nd</sup>meeting.

#### Attachment(s):

N/A



TO: Toll Bridge Program Oversight Committee DATE: August 25, 2010

(TBPOC)

FR: Steven Hulsebus, Toll Bridge Program Design Manager, Caltrans

RE: Agenda No. - 4c1

San Francisco-Oakland Bay Bridge Project Updates

Yerba Buena Island Transition Structure Contract No. 2

Scope Change Request

#### Recommendation:

APPROVAL

#### Cost:

\$11.8 million approx

#### **Schedule Impacts:**

N/A

#### **Discussion:**

This is a proposal to add a soldier pile wall and public access paths at the terminus area of the bicycle/pedestrian path at Yerba Buena Island (YBI). The soldier pile wall allows for the widening of Southgate Road so that the bicycle/pedestrian landing and public access path under the new structure can fit.

This will be constructed in the YBITS2 contract. It includes the landing of the bicycle/pedestrian path and its connection to a bus stop near the electrical substation (intersection of Macalla Road and Southgate Road) and a bicycle and pedestrian path to be constructed by the city of San Francisco (their contract may be included as part of the YBITS2 contract).

Attached are plans and a preliminary simulation of the area. The cost for this item reflects the added costs for the new soldier pile wall, slope stabilization of the hillside above the USCG facility, refinements made to the landing area, and the public access connections to the bus stop and the city's paths.



#### Benefits of adding this scope to the YBITS2 contract:

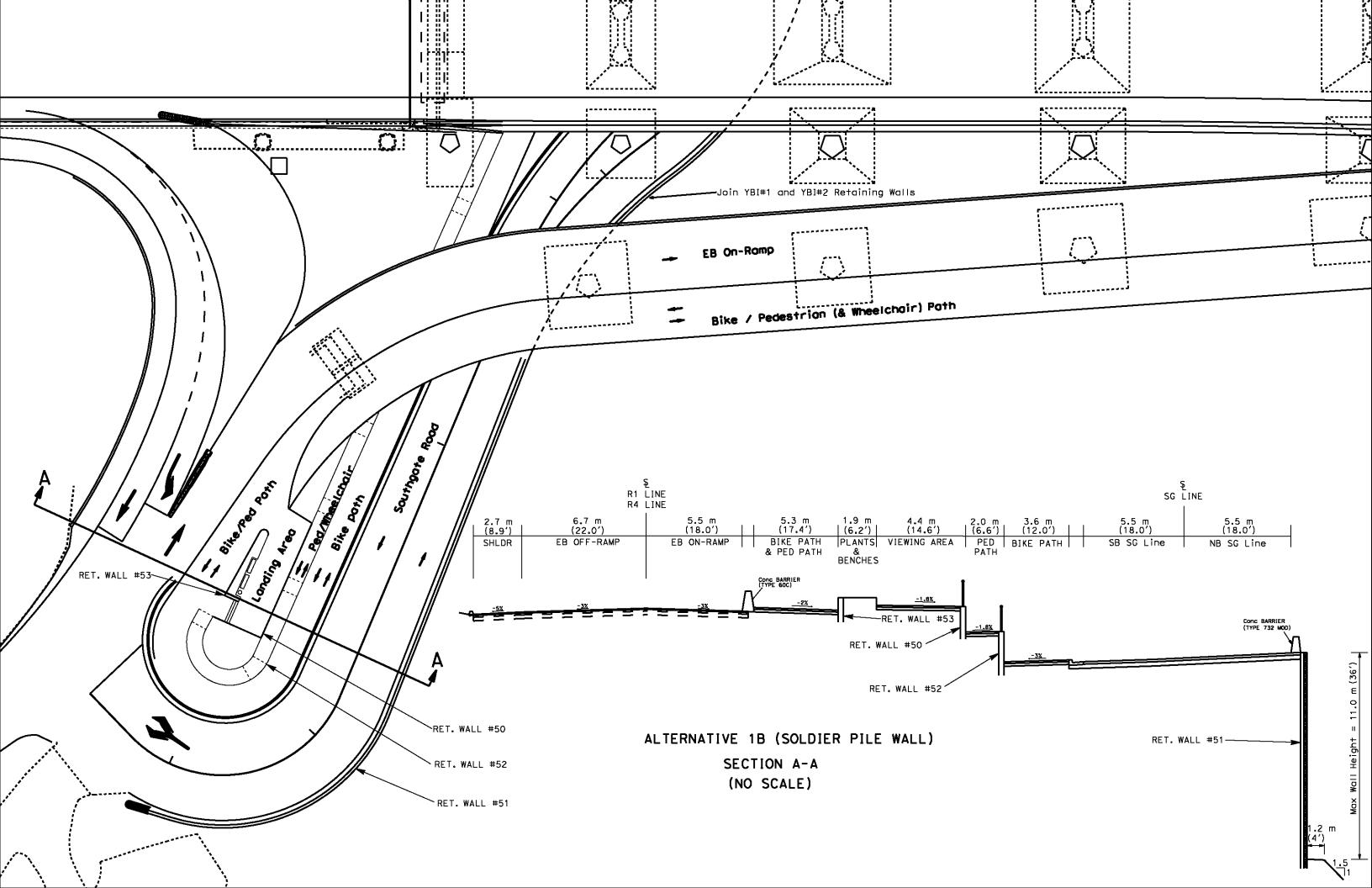
- Provides ADA accessible pedestrian path
- Landing area meets the requirements of the BCDC permit in terms of size of the landing
- Soldier pile wall is the most economical choice for a wall
- The higher wall provides for the width needed to provide paths (separate bicycle and pedestrian paths) that meet ADA requirements and provides better width for large trucks turning through this intersection

#### Key elements of this added scope are:

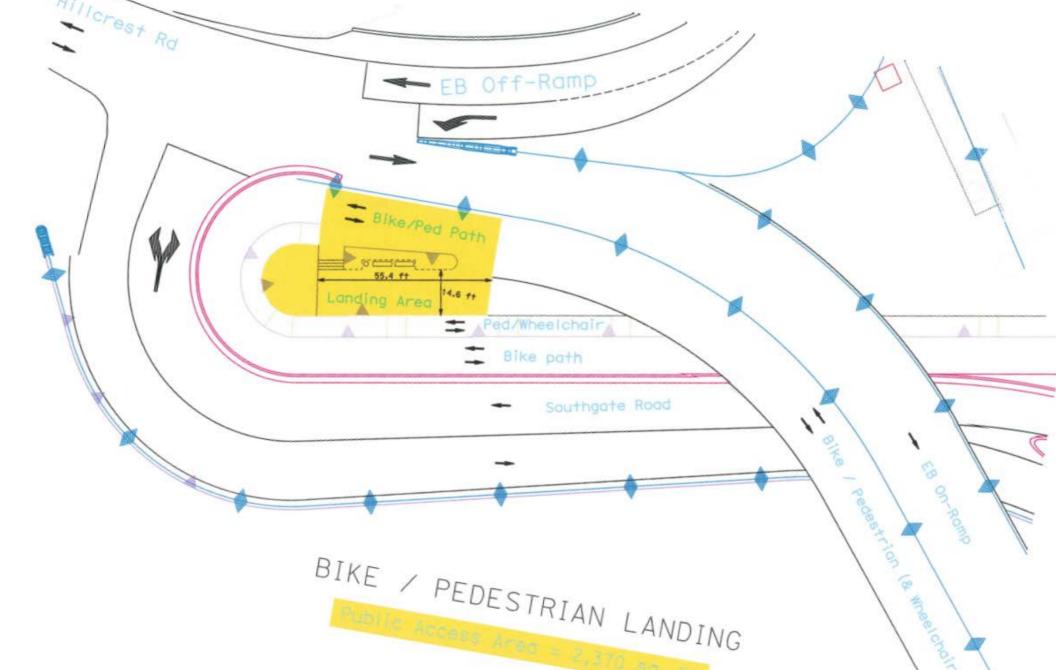
- Soldier pile wall 36' (11 m) feet high+/-
- ADA accessible pedestrian path
- Class I bicycle path
- Landing for the bridge bicycle/pedestrian path that meets BCDC permit requirements
- Stabilization of the hillside above the USCG facility

#### Attachment(s):

- 1. Southgate Road X Section
- 2. Rough Simulation of Southgate Road Design
- 3. Bike Landing BCDC









TO: Toll Bridge Program Oversight Committee DATE: August 25, 2010

(TBPOC)

FR: Brian Maroney, Deputy Toll Bridge Program Manager, Caltrans

RE: Agenda No. - 4d1

San Francisco-Oakland Bay Bridge Updates

Item- Oakland Touchdown No. 2 - Temporary OTD Detour for Acceleration

of the SFOBB

#### Recommendation:

**APPROVAL** 

#### Cost:

Tens of millions of dollars

#### **Schedule Impacts:**

Acceleration of ~ 1/2 year

#### **Discussion:**

This memo is to initiate presentation to, and request from, the TBPOC to approve and/or redirect work with respect to a Temporary OTD Detour for the purpose of acceleration of OTD and SFOBB work and opening. Supporting images illustrating the potential work accompany this memo. The PMT have been briefed on this work and it is understood that the individual TBPOC members may have been briefed to some degree by their associated PMT members. The September 2, 2010 TBPOC meeting agenda incorporates time for an efficient presentation and discussion. The design work is at an early stage of development.

Once the SFOBB SAS and YBI are completed to a condition such that they can carry traffic in the westbound direction, the OTD can proceed with demolition work, the remainder of the bridge piling, substructure, and superstructure work; the majority of the lightweight cellular concrete work; and powering-up of the Skyway and OTD bridge electrical systems. It has been proposed by some to effectively decouple this work from the SAS and YBI, move this work forward, and allow for simultaneous opening in the west and east directions of traffic by use of a temporary detour at the east end of the SFOBB corridor.



The Temporary OTD Detour is envisioned to be on land on the Oakland Mole between Pier E23 and the Toll Plaza. The accelerated work could include 3 major phases: Phase 1, in which a temporary eastbound roadway to the south of the existing eastbound roadway would be constructed and implemented (R/W acquisitions, including utility relocation and/or protection, are required prior to this work);

Phase 2, in which the existing westbound roadway including approximately 500 ft of bridge widening and demolition work would be constructed and implemented to the south of the existing westbound roadway; and

Phase 3, in which the remaining permanent OTD foundation, substructure, and superstructure; the overwhelming majority of the roadway lightweight cellular concrete; and power utilities can be connected and tested.

Implementation of the envisioned Temporary OTD Detour does not alleviate the currently planned 72-hour bridge closure at the time of the new bridge opening. Closures for efficient and safe execution of roadway conforming and striping are expected and would be developed working with construction and the PMT.

It is currently envisioned that 5 mandatory design exceptions would be required. Currently, on the bridge and just to the east of the bridge, traffic lanes are below modern standards at 11.5 feet of width, no shoulders, and relatively tight right and left curves coming off the bridge. These conditions could suggest posting now. At the Toll Plaza and to the west traffic lanes are generally at modern standards. Between these bounding regions, traffic lanes and shoulders transition. With the temp OTD Detour in place it is currently envisioned traffic speeds would be posted at 40 mph due to the temporary conditions that would also be below permanent standards.

A number of authorizations are requested with respect to this work:

- 1) Approval to continue to develop the plans, specifications, and estimates for this work.
- 2) Approval to move forward with acquiring all necessary right-of-way features as quickly as possible.
- 3) Approval to develop and implement a support budget for this work.



- 4) Approval to develop a plan to execute this work in construction using an expedited process (short list bidding under a Director's order or CCO).
- 5) Approval to delay and revise the scope of OTD2 due to the implementation of the Temporary OTD Detour.

Schedule and cost estimates are currently under development. A risk register has been developed. Once available, these data will be combined statistically.

#### Attachment(s):

Temp OTD Detour PMT slides

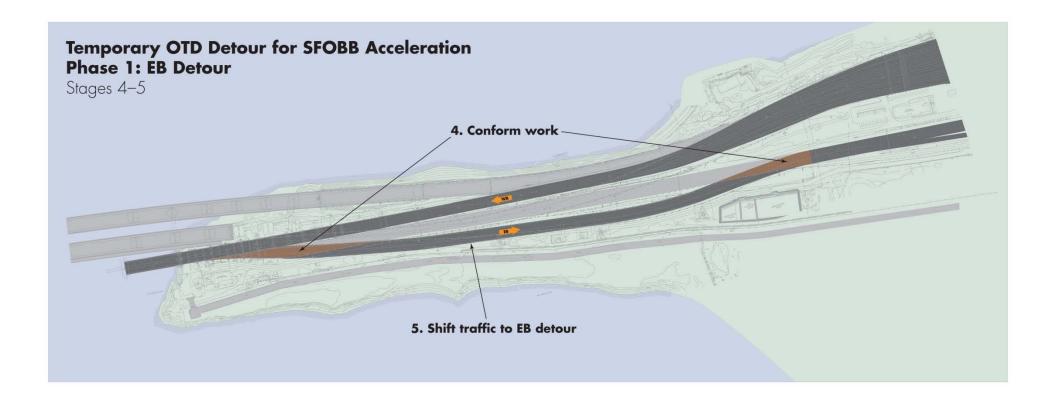
# Temporary OTD Detour for SFOBB Acceleration

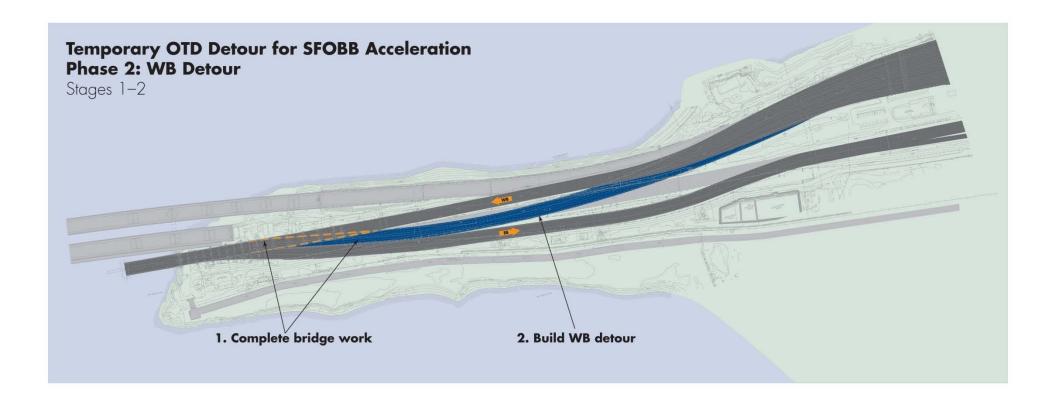
The idea is to temporarily route traffic to the south and so we can demo part of the old structure and complete the rest of the new structure and most of the roadway work now, instead of waiting until after the SAS can carry traffic.

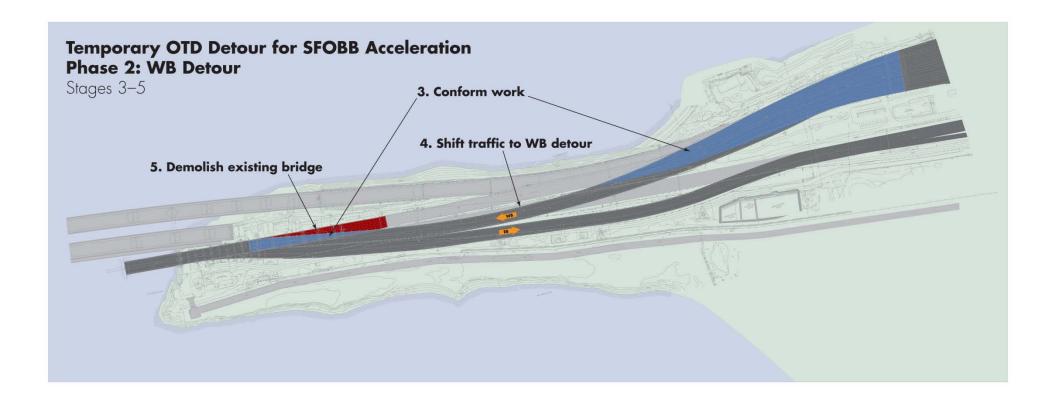
"Don't put eff until tomorrow what you can do today."

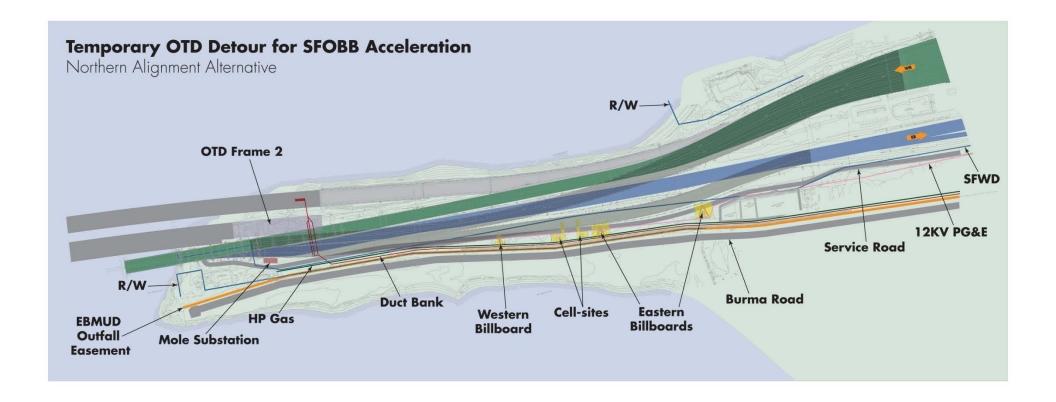
ASSIGNED OPEN DEC 2019

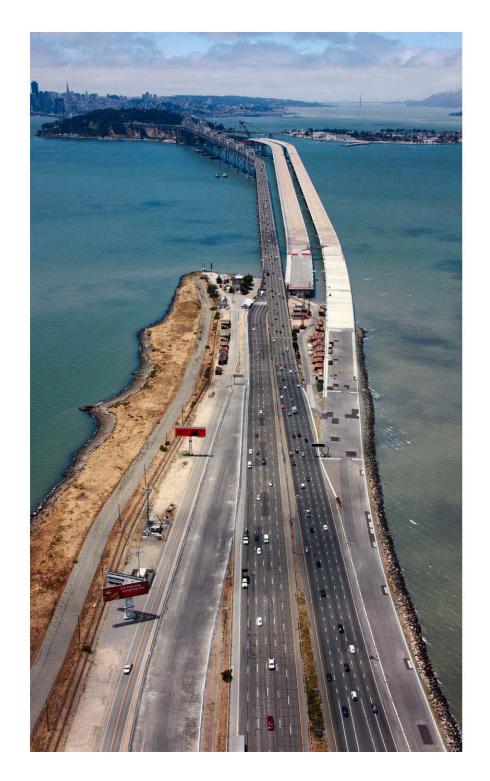




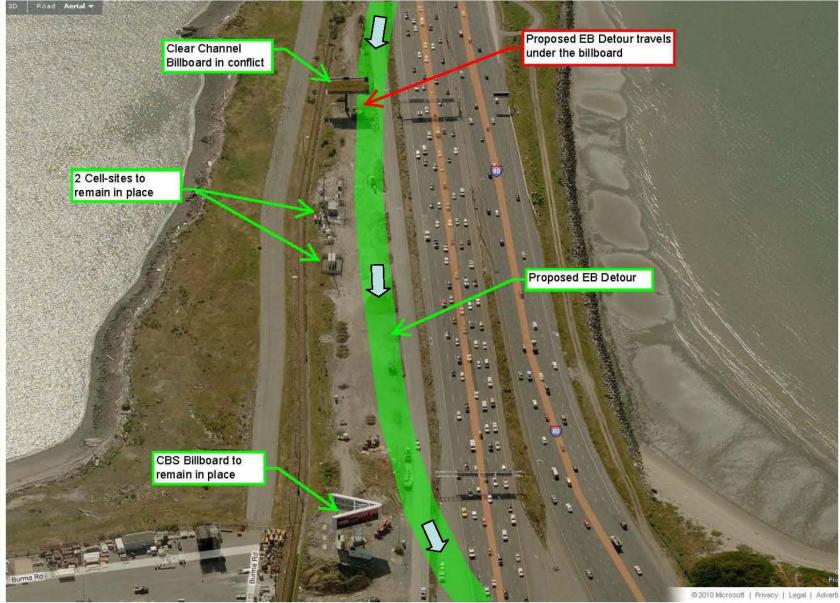














Facilities next to the south detour



TO: Toll Bridge Program Oversight Committee DATE: August 25, 2010

(TBPOC)

FR: Jason Weinstein, Senior Program Coordinator, BATA

RE: Agenda No. - 5a

Antioch/ Dumbarton Bridge Seismic Retrofit

Updates

#### **Recommendation:**

For Information Only

Cost:

N/A

#### **Schedule Impacts:**

N/A

#### **Discussion:**

#### Antioch Bridge

The Department is reviewing shop drawings for Bearing Stiffeners, Cross Bracing (Pier 31 only) and Hinges. Progress in the field continues without disturbing the owls. An update of on-going field work is as follows:

- Temporary Roadway #2 at Sherman Island 60% complete. Work from pier 31 to 22 to resume in mid September.
- 90% of the curtain wall has been removed at the Slab Span Bridge. The remaining panels to be removed near the end of project.
- Completed installing stair towers at piers 22, 23, 28-30, 33, 36, and 38. Platforms have been installed at piers 33, 38 and 37.

The first batch of seismic isolation bearings will be completed by October 22, 2010. A portion of this first batch will be shipped to the University of California in San Diego (UCSD) for independent assurance testing. They will be tested in the same manner as done during the prototype contract. The first bearings are currently scheduled to be installed in late March 2011, so the production of the bearings should not affect the contractor's schedule for installation.



#### **Dumbarton Bridge**

On June 15, 2010, the Department opened seven bids for the Dumbarton Bridge Seismic Retrofit Project. The Dumbarton Retrofit Project had an engineer's estimate of \$73 M, which included supplemental work and contract contingencies, and included a maximum construction duration of 810 working days. The low bidder, Shimmick Construction Company, Inc. bid \$46.6 M and 460 working days. The project was awarded to Shimmick on August 6, 2010 and is scheduled for approval in early September 2010.

Once the contract is approved, formal meetings with the contractor will begin. A preconstruction meeting is tentatively set up for the week of September 6<sup>th</sup>. The Department is in the process of establishing a field office near the Dumbarton Bridge for administration of the contract.

Attachment(s):

N/A

## ITEM 5: ANTIOCH/ DUMBARTON BRIDGE SEISMIC RETROFIT

b. Dumbarton Bridge Seismic Retrofit Budget Change (supporting documents to be sent under separate cover)

#### ITEM 6: TBPOC/ ABF/ TYLMN DISCUSSION

a. Self-Anchored Suspension (SAS)
 Superstructure Mitigation and Acceleration
 Update (supporting documents to be sent under separate cover)



TO: Toll Bridge Program Oversight Committee DATE: August 25, 2010

(TBPOC)

FR: Jason Weinstein, Senior Program Coordinator, BATA

RE: Agenda No. - 6b

Item- TBPOC/ ABF/ TYLMN Discussion SAS Superstructure Budget Change

#### **Recommendation:**

**APPROVAL** 

Cost:

TBD

#### **Schedule Impacts:**

N/A

#### **Discussion:**

Contract Change Order (CCO) #160 resolves delay damage claims that occurred during the development of shop drawings for the SAS and in particular for the East End OBG sections. It also provides incentives for the following:

- Meeting an internal milestone for delivering orthotropic box girder (OBG) segments 13 and 14 by July 2011
- Achieving readiness for the Seismic Safety Opening of the SAS between October 20 and November 30, 2013

The current Capital Outlay budget for the SAS contract in the 2<sup>nd</sup> Quarter 2010 report is \$1.754 B. The current forecast for Capital Outlay in the 2<sup>nd</sup> Quarter 2010 report is \$2.047 B. While the SAS contract has sufficient funds identified in the current forecast to cover the costs for CCO #160, the current SAS project contingency stands at approximately \$60 M, which is insufficient to cover the cost of CCO #160. A budget change will be required to draw from budgeted program contingency.





#### **Budget Recommendation:**

The SAS budget must be revised to include CCO #160. The recommended option for revising the budget includes adopting the current forecast as the new budget. See table below.

	Current Budget (Millions)	Proposed Budget based on Q2 forecast (Millions)	Proposed Increase in Current budget based on Q2 forecast (Millions)
Capital Outlay	\$1754	\$2047	\$293
Construction			

The timing of actions and events are worth noting with respect to the requested budget change for the SAS.

September 2, 2010	The TBPOC will meet with ABF to sign a cover letter of agreement
	with respect to proposed CCO #160 language.
September 8, 2010	At the BATA Oversight Committee Meeting, the revised budget for

SAS will be discussed and referred to the full Authority.

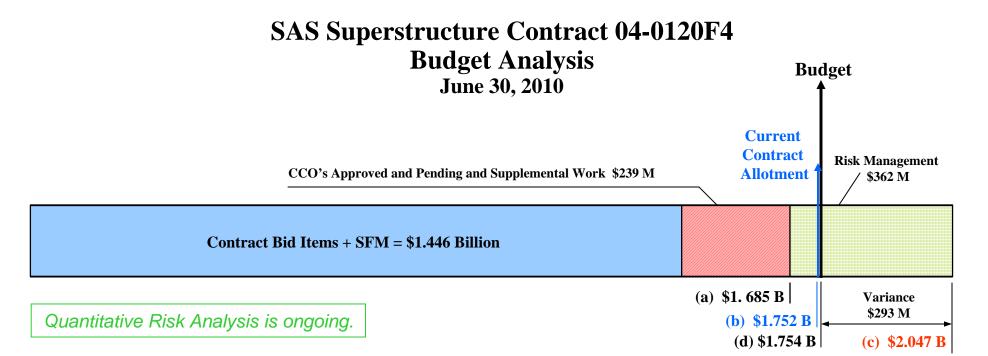
September 22, 2010 At the BATA meeting, the revised budget for SAS will be approved, and the Department can then execute CCO #160. The Department will amend the construction allotment to coincide with the budget approval.

The cover letter signed by the TBPOC and ABF should reference that budget authority exists, but that it is subject to allocation to the SAS project by BATA which will take place on September 22, 2010.

While not covered as part of this budget change request it is worth noting that execution of CCO #160 will have a positive impact on time and in particular should reduce schedule risk with respect to program level risks that are not captured in a specific contract. The risk management team will be reviewing these risks over the next quarter and updating the forecast in the 4<sup>th</sup> Quarter 2010 report.

#### Attachment(s):

- 1. SAS Superstructure Contract 04-0120F4, Budget Analysis, June 30, 2010
- 2. BATA Oversight Committee Meeting Memo, September 2, 2010



#### Contract 04-0120F4 SAS Superstructure Current Contract Budget Funding Status

June 30, 2010 Basis

#### Contract 04-0120F4 SAS Superstructure Contract Forecast At Completion (FAC) & Variance

June 30, 2010 Basis

Contract Bid Items	\$	1,434,085,935	Contract Bid Items		\$ 1,434,085,935
State Furnished Materials (SFM)	\$	12,473,475	State Furnished Materials (SFM)		\$ 12,473,475
Subtotal	\$	1,446,559,410		Subtotal	\$ 1,446,559,410
Supplemental Work	\$	52,418,000	Supplemental Work Remaining		\$ 37,196,207
Contingency at 10%	\$	148,652,590	CCO's		
Subtotal Original Contract Allotment		1,647,630,000	CCO's (Approved (104) + Pending (67) = Total (171)		\$ 173,239,649
Supplemental Budget Allocation Approved		104,090,000	CCO's = or > \$1Million Pending POC's approval (5)		\$ 28,300,000
Subtotal Current Contract Allotment		1,751,720,000 (b)		Subtotal	\$ 1,685,295,266 (a)
Budget Transfer to Phase 8	\$	2,000,000			
Remaining Unallotted Budget (Current Contract Budget - Current Contract Allotment)	\$	-	Risk Management Cost - Q2 2010 50% Probable		\$ 361,465,000
Total Current Contract Budget	\$	1,753,720,000 ( <b>d</b> )	Q2 2010 Total	•	\$ 2,046,760,266 ( <b>c</b> )
Reported Total Forecast At Completion \$1,991,400,000 In 1st Quarter 2010 TBSRP Report		\$1,991,400,000	Variance ( Total - Current Budget )		\$ 293,040,266

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Memorandum

TO: BATA Oversight Committee DATE: September 2, 2010

FR: Executive Director W. I. 1251, 1256

RE: San Francisco-Oakland Bay Bridge Self Anchored Suspension Span (SAS) Contract

The Toll Bridge Program Oversight Committee (TBPOC) is currently discussing a budget revision to the San Francisco-Oakland Bay Bridge (SFOBB) Self Anchored Suspension Span (SAS) contract to facilitate the payment of a Contract Change Order (CCO) between Caltrans and American Bridge/Flour. The CCO is intended to resolve the delays that occurred during the development to date of the East End orthotropic box girder (OBG) sections and provide incentives for project acceleration to meet milestones for delivery of critical OBG segments and Seismic Safety Opening of the SAS. Execution of the CCO will require a budget revision and a revised fund allocation for the SAS project.

As a result of the discussions of the TBPOC, at the Committee meeting, staff will provide an update on the project activities and schedule and request that the Committee refer a budget revision and fund allocation for the SAS project to the Authority.

Steve Heminger	

SH:jw

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#### ITEM 6: TBPOC/ ABF/ TYLMN DISCUSSION

c. SAS Superstructure CCO 160 (supporting documents to be sent under separate cover)

### **ITEM 7: OTHER BUSINESS**

No Attachments